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ADAPTATIONS TO AN HIV COUNSELING AND TESTING INTERVENTION FROM A COUNSELOR PERSPECTIVE

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Abstract

Understanding the balance between fidelity and adaptation for evidence-based interventions has the potential to improve their translation from research to practice. The Translation into Practice study explores variation in program implementation within organizations utilizing the RESPECT program, an HIV counseling and testing intervention. Counselors (N = 70) were interviewed using a semistructured interview guide to examine both the influential factors on, and the subsequent adaptations to, RESPECT. Almost all counselors reported making adaptations (N = 69). Adaptations were made both to key characteristics (mean [M] = 2.24, standard deviation [SD] = 1.3) and to core components (M = 0.5, SD = 0.8). Counselors identified the environmental context and factors within the counseling context as common influences leading to adaptation. These findings suggest adaptations were a routine part of program usage. To improve implementation of the RESPECT program, further research is needed to assess the degree to which adaptations can be made to better meet the needs of agencies and clients without compromising fidelity.

Public health leaders have emphasized the use of prevention programs demonstrating effective outcomes as a strategy to improve disease prevention efforts. Evidence-based interventions (EBIs) demonstrating efficacy through empirical testing have become widely available for dissemination and implementation in community settings (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). The Diffusion of Effective Behavioral Interventions (DEBI) compendium, developed by the Centers for Disease Control and Prevention (CDC), supports a collection of EBIs specifically designed for HIV prevention and is available to local departments of public health (DPHs) and community-based organizations (CBOs; CDC, 2011).

Despite the availability of EBIs, the translation of interventions from research settings to local organizations that use them remains a challenge. Often EBIs are not implemented with fidelity to the original program design, potentially compromising the integrity of the program (Durlak & DuPre, 2008; Kliche, Plaumann, Nöcker, Dubben, & Walter, 2011). Factors such as insufficient organizational capacity, lack of quality assurance protocols, or different needs of target populations may lead organizations to change how the program is implemented (Gandelman, DeSantis, & Rietmeijer, 2006).

RESPECT

The DEBI compendium has provided an opportunity for researchers to develop a better understanding of program implementation, adaptation, and fidelity (Collins, Harsh-barger, Sawyer, & Hamdallah, 2006). The Translation into Practice (TIP) study has focused on one such DEBI—the RESPECT program. A clinic-based counseling and testing intervention targeting at-risk individuals, RESPECT has demonstrated efficacy in reducing risk behaviors and sexually transmitted infection (STI) rates by utilizing theory-based counseling techniques. During counseling sessions, clients are actively engaged in identifying risk behaviors and possible solutions for risk reduction (Kamb et al., 1998).

To improve implementation of RESPECT, as well as other widely diffused EBIs, research literature suggests the importance of identifying core portions of interventions fundamental to their success (Elliott & Mihalic, 2004; Glasgow & Emmons, 2007; Kelly et al., 2000; Norton, Amico, Cornman, Fisher, & Fisher, 2009). *Core components* are linked to behavioral theory and are thought to be responsible for successful outcomes of the intervention (Fixsen et al., 2005). Complementary to core components, other adaptable portions of interventions are defined as *key characteristics*. These are activities and delivery methods of an intervention that may be tailored to the contexts and needs of different agencies and at-risk populations (Fixsen et al., 2005). Consequently, key characteristics are malleable components of the program that may be adapted to improve fit with the organization and the target population; however, organizations are encouraged to implement core components with fidelity to the original design to maintain the integrity and effectiveness of the program. The CDC (2011) designates both core components and key characteristics for all EBIs, including RESPECT (see Table A1).

Adaptations and Influencing Factors

Despite general agreement that adaptations inevitably occur when translating an intervention from research to practice, gaps remain in our scientific knowledge about balancing the need for adaptation to local context with the need for fidelity to core program components (Glasgow & Emmons, 2007; Morrison et al., 2009). The literature emphasizes fidelity to core components, recognizing that adapting them can compromise program fidelity and potentially reduce the effectiveness of programs (Elliott & Mihalic, 2004; Norton et al., 2009; Owczarzak & Dickson-Gomez, 2011). Thus, core components have frequently served as criteria for measuring fidelity (Mowbray, Holter, Teague, & Bybee, 2003; Neumann et al., 2011).

Research also suggests adaptations to key characteristics are as common as, if not more so than, adaptations to core components (Kalichman, Hudd, & Diberto, 2010; Veniegas, Kao, & Rosales, 2009). The influence of key characteristic adaptations on intervention outcomes is unclear (Kalichman et al., 2007; Malow et al., 2009; Morrison et al., 2009; Neumann et al., 2011; Owczarzak & Dickson-Gomez, 2011). Research conducted with group-level interventions found that adaptations to key characteristics were neutral in their effects on intervention outcomes (Kalichman et al., 2007; Neumann et al., 2011). Other evidence suggests adaptations to key characteristics may facilitate achievement of the program outcomes (Morrison et al., 2009; Owczarzak & Dickson-Gomez, 2011; Veniegas et al.,

2009), particularly where cultural differences exist between the original target population and the specific local target population (Malow et al., 2009; Prather et al., 2006).

Factors influencing how agencies and program delivery staff adapt interventions are ubiquitous. Many adaptations are made intentionally to integrate interventions into the local agency and community context (Galbraith et al., 2009; Kalichman et al., 2010; Morrison et al., 2009; Neumann et al., 2011; Owczarzak & Dickson-Gomez, 2011). Conversely, there is some indication that agencies and staff members make adaptations to programs based on unanticipated factors that change the context in which a program is delivered (Chillag et al., 2002; Hamdallah, Vargo, & Herrera, 2006). For example, Ham-dallah and colleagues (2006) found that facilitators of the VOICES/VOCES intervention for HIV prevention with African American and Latino men and women conducted in small groups adapted the intervention to accommodate the “unanticipated enthusiastic response from clients” (p. 179). These findings suggest that, in practice, programs are adapted to unique contexts as a result of unanticipated factors in addition to intentional adaptation. Despite this evidence, a thorough description and analysis of unanticipated factors that lead to contextual adaptations is lacking in the research literature.

Context-specific adaptations become particularly relevant for one-on-one counseling-based programs like RESPECT, where client characteristics and behaviors may lead counselors to adapt the program. Counselors who provide RESPECT are uniquely situated to provide insight into these kinds of adaptations, given that they use the program on a regular basis in a variety of contexts with a variety of clients. The current study qualitatively explores adaptations made to RESPECT from the perspective of program counselors who have fully integrated the program into the agency. Our study also aims to describe those context-specific factors that influence counselors to make unanticipated adaptations to RESPECT.

METHODS

Data for the current article were collected as part of a larger investigation, the TIP study, a national survey of CBOs and DPHs delivering RESPECT (Catania, Dolcini, Gandelman, Narayanan, & McKay, 2014; Dolcini, Catania, Gandelman, & Ozer, 2013). The current report utilizes data from semistructured interviews with program delivery staff (counselors). Westat Corporation collaborated on instrument development and conducted interview quality control, sampling, and data collection. Institutional Review Boards at Westat Corporation and Oregon State University approved all protocols.

Procedures

The agency sample frame ($N = 30$) was constructed from listings of the Academy of Educational Development, CDC Behavioral Training Centers, and Kaiser Family Fund's National HIV Prevention Inventory (National Alliance of State Territorial AIDS Directors & The Kaiser Family Foundation, 2009). Quota sampling was used to fill four cells: urban DPH ($n = 7$), urban CBO ($n = 10$), nonurban DPH ($n = 7$), and nonurban CBO ($n = 6$). Agencies were from 11 states, representing all regions of the United States. Agencies had been conducting RESPECT (although local program names may differ) for a period of 6 months or more.

Program counselors ($N = 70$; median age = 43 years; 62% female; 46% White, 20% African American, 15% Latino, 18% other; education: 1% high school not completed, 17% high school, 25% associate's degree, 40% bachelor's, 17% master's) were identified by executive directors at the agency. As many as four counselors were interviewed at each agency. Priority was given to selecting counselors that administrators identified as being core program providers (*i.e.*, they provided the program on a regular basis). In agencies with four or fewer core counselors, we recruited and interviewed all counselors; in addition, we sampled from the pool of counselors who were providing RESPECT on an ad hoc basis. In agencies with more than four core counselors, we randomly selected four for recruitment and interview.

Interviews were recorded and transcribed, and transcriptions were compared to the digital recordings for quality checking. Small incentives were provided to interviewees (\$25 gift certificate cards). Consent for participation was given verbally. All counselors agreed to participate. Approximately 85% of counselors were full-time employees, and 83% divided their time between RESPECT and other tasks. Counselors had worked at their current agency for an average of 7.3 years and had been conducting RESPECT for an average of 3.6 years.

Measures

Counselors were interviewed using semistructured questions to assess different dimensions of fidelity and adaptation to RESPECT and the influences that led to program adaptation. Sections of counselor interviews were coded to capture descriptions of context-specific adaptations. Examples of questions included were as follows: Are there any barriers to implementing RESPECT? Have you made modifications to RESPECT in order to better fit your agency's workforce, physical space, the services you provide, your financial situation, or your clients' needs? Word queries using a list of terms, such as *adapt*, *adaptation*, *adjust*, and *change*, generated by the research team were also conducted. These searches did not yield any additional instances of adaptations outside of the identified interview questions included as part of the initial structural coding.

Data Management and Analysis

A directed content analysis, which utilizes existing theory and research literature to guide qualitative analysis (Hsieh & Shannon, 2005), was conducted. Using this approach, the researcher may use codes that are predetermined and supported by existing literature, but may redefine these codes to better characterize the data as the analysis progresses. Analyses were conducted by members of the TIP research team at Oregon State University using a team approach similar to that described by Stern (1991), which generate coding schemes, coding definitions, and interpretations through consensus building among team members. NVivo 8.0 was used to facilitate coding and interpretation of semistructured interview data.

Given that the interview with counselors covered a variety of topics related to the implementation and delivery of RESPECT, the research team initially identified specific interview questions likely to provide information relevant to the research topic using the

interview instrument (see the Measures section). The content of these questions and responses were then structurally coded as a first step in the coding process (Saldana, 2013).

The extracted content was then coded for context-specific adaptations. A context-specific adaptation was defined *a priori* as an adaptation where the counselor reported deviating from (i.e., modifying, adding, or dropping) standard RESPECT protocol or mode of program delivery as a result of an unpredicted influence. Thus, context specific adaptations exclude adaptations made systematically or as part of agency policy. Adaptations were then subcoded as core component or key characteristic adaptations. The description of RESPECT outlining core components and key characteristics as defined by the CDC (2011) served as criteria for coding adaptations (see Table A1).

In addition, adaptation of standard protocols outlined in training materials—specifically, defining the target population (which is at-risk individuals) for RESPECT—were considered core component adaptations. Thus, delivery of RESPECT to a low-risk individual was considered a core component adaptation. The fifth core component of RESPECT—to provide quality assurance protocols—was excluded from this analysis because it is determined at the agency rather than the counselor level.

Once all context-specific adaptations had been identified, data were coded to identify factors that lead counselors to adapt. The research team reviewed a subset of interviews and used existing literature to generate an initial coding scheme for factors influencing adaptations. The coding scheme was then applied to all content and revised to incorporate new data. The first and third authors independently reviewed cases of counselors to check for reliability of coding. In cases of disagreement, coders discussed and came to consensus. Any unresolved cases of disagreement in interpretation were brought to the principal investigators for resolution.

Last, the research team generated a set of thematic codes to conceptually organize and interpret the various factors that lead counselors to make adaptations. The various themes and interpretations were discussed until there was consensus among all team members. Data could be double coded for themes in the instance that a counselor reported multiple factors influencing the adaptation. Detailed descriptions of each theme are included in the results.

RESULTS

All counselors mentioned at least one context-specific adaptation that they had made or would make to RESPECT. The counselors also described the situations and factors they felt lead them to do so. All of the four core components were adapted by at least one counselor. Adaptations to key characteristics (mean [M] = 2.24, standard deviation [SD] = 1.3) were more common than adaptations to core components (M = 0.5, SD = 0.8). Factors leading to context-specific adaptations fell into two broad thematic categories. First, some adaptations occurred in response to an environmental context. Second, in cases where counselors delivered RESPECT in a clinic setting, influences occurred within the context of the counseling session. Two subthematic categories of factors fell within the context of the counseling session: client characteristics and client–counselor relationships.

Last, many instances of adaptation occurred in response to multiple factors. The results are organized according to these themes to illustrate the factors reported by counselors that lead them to make adaptations to RESPECT. Both adaptations to key characteristics and adaptations to core components are provided to illuminate the kinds of adaptations found within each factor.

Environmental Context

Counselors reported adapting RESPECT while delivering counseling and testing at locations outside of the normal facility of operation. These situations tended to be within the community, provided testing to large numbers of people, encouraged testing at the clinic, or provided testing to at-risk populations who would not otherwise come to the organization for testing (*e.g.*, intravenous drug users or women engaged in prostitution). When testing offsite, counselors primarily had difficulty maintaining fidelity to conducting one-on-one counseling (a core component of RESPECT).

Testing offsite made it difficult for counselors to conduct one-on-one counseling for multiple reasons. One counselor commented on the challenges of conducting RESPECT offsite, because of client volume and flow and core component adaptations made to the program by generally shortening the session:

So, we have a rush because it's been publicized through TV and radio stations....

So, in that case, if we have a lot of people, I'd say that we would go without counseling. (core component adaptation)

Other counselors reported adaptation of core components to RESPECT in the field by abandoning RESPECT completely or by implementing a screening process to eliminate clients who did not desire counseling. One counselor described a screening process developed by the agency and the resulting outcomes:

We implemented the screening ... because sometimes [in the field] you're talking to a sex worker—she wants the test, and you're going to pull out five pages and go over each one of them on the side of the street. (core component adaptation)

Although the counselor did not modify RESPECT *per se*, the at-risk client had the option to skip counseling despite being an ideal fit for the program. The client found the program intrusive and inconvenient given the context of the situation. Underlying this statement and others like it was the issue of privacy in the field. Counselors found it difficult to conduct one-on-one counseling sessions even though the clients reached were ideally suited to the intervention.

However, some counselors were able to adapt the program to identify at-risk individuals in public areas but maintain the core component of one-on-one counseling by then moving the client to a quiet location for counseling and testing:

Counselor: Out on the streets there's a lot of distraction on the target populations

Interviewer: How do you change the protocol to deal with those distractions?

Counselor: We go ahead and move the clients to some space for more privacy. (key characteristic adaptation)

When counselors were able to implement the program successfully, it was because they created a private environment rather than change the core components of the program.

Counseling Context

In an agency setting, counselors reported having to make context-specific adaptations to RESPECT, largely based on the risks expressed and behavioral cues, indicating engagement of the clients throughout the counseling sessions. Counselors used these risks and cues to make judgments about what clients needed in terms of counseling and made adjustments to the program accordingly.

Client risk.—Per protocol, risks are assessed at the beginning of the RESPECT session through quick survey or interview instruments, or through familiarity with returning clients. There was a general consensus among counselors that it was necessary at a minimum to explore risk (a core component of RESPECT) with clients to understand their needs. Many counselors tailored the risk assessment component of RESPECT once certain risk factors were established or eliminated. Some counselors felt that RESPECT should be discussed only in terms of current risks. For example, one counselor discussed eliminating some questions:

You have to tailor it based on what they need. So, if someone who isn't injecting, for instance, I'm not going to sit there and go over information that they're not going to need for their current risk.... I tailor based on what they need. (key characteristic adaptation)

This counselor recognized that risk behaviors are different for every client and felt that exploring irrelevant risk behaviors would ultimately be a misuse of counseling time.

Once initial risk assessments were made, counselors were encouraged to adapt RESPECT by providing a truncated version of RESPECT to low-risk clients, dropping the latter core components of the intervention designed to minimize risk behaviors. Clients considered at-risk should have received the RESPECT program in its entirety. Counselors reported categorizing clients based on different ideas of what it means to be at risk. These ideas reflected criteria outlined by the CDC used to conduct risk assessments as well as criteria based upon their own judgment and experience. From these initial assessments, counselors made judgments about the needs of their clients and opted to provide either truncated or full versions of RESPECT.

Low-risk clients.—While RESPECT is designed to be a risk-reduction program for at-risk clients, some counselors felt it was important to conduct RESPECT in entirety with all clients regardless of risk. As a result, some counselors failed to appropriately adapt RESPECT by truncating the program for low-risk clients:

I think there's always something to be gained by talking about risk behavior, and even if somebody feels like they're a low risk, or even if they actually are a low

risk, it still gives an opportunity to say ... if you look at the continuum of risk ... this activity may lead to other things. (core component adaptation)

In this case, the counselor felt that it was important to take advantage of the opportunity to provide a prevention message. Other counselors also reported providing counseling to low-risk clients because they felt clients might not be disclosing all of their risk behaviors. In this case, clients were considered at-risk simply because they were seeking testing:

Even though they tell you that they don't have any risk, they wouldn't be there if they had no risk, and it doesn't hurt to educate a person more.... (core component adaptation)

In both examples, counselors utilized the opportunity to provide the entire RESPECT program despite indication from the risk assessment that the clients were low risk and should have received a truncated version of RESPECT.

New versus repeat clients.—Beyond exploring risk behaviors, another method of assessing risk level was considering the number of times a client had come to the agency for testing. Counselors drew comparisons between new and repeat clients with the assumption that repeat testing clients were at higher risk than those who were being tested at the agency for the first time. Consequently, counselors distinguished between needs of new clients versus repeat clients. One counselor discussed the differing needs of these two types of clients:

With the new clients ... I try to make sure that they understand the risks that they're having. With the repeat clients, it's a different focus for them. They already know the situation, they already know previous information, so [rehashing] the same information is not only a waste of time, but it's also some people take it as an insult to their own knowledge. They understand this, but their behavior hasn't changed. ... We have to try something else. (key characteristic adaptation)

The counselor felt that a straightforward approach worked well with new clients. In contrast, repeat clients required an approach that integrated the knowledge that clients already had about his or her risk.

Counselors did not report making core component adaptations for new clients. With repeat clients, counselors had divergent strategies to accommodate the client, leading to some adaptations. Some counselors continued to provide RESPECT for each session as a mechanism to reduce risk behavior steadily over the course of the sessions. From this stance, counselors described the sessions as an “ongoing process” or a “reassessment”:

I'm aware of their risks, and ... it's more or less just heightening their awareness of other risks, re-heightening their awareness of the current risks that they may or may not still be participating in, and looking for different teachable moments based on certain things that happened prior to their last session. (key characteristic adaptation)

Using previous RESPECT sessions to build on subsequent sessions, counselors attempted to reduce risk slowly over time. Other counselors felt it was important to go through the program completely:

If they're testing every 3 months and then they're just going out and putting themselves at the same risk every 3 months, then you know ... I'm going to need to talk to them about everything. Each time. (key characteristic adaptation)

In this case, the counselor felt that he or she could not make assumptions about the client's risk behaviors simply because the client had been through RESPECT before, essentially treating the repeat client as he or she would a new client.

The only situation in which counselors made core component adaptations to RESPECT was for repeat testers who were considered low risk. For instance, a counselor reported:

They're just coming in as a routine checkup, but they've been playing it safe and all of that. It's the repeat testers with the low risk that [I most modify the program for]. (core component adaptation)

In this case, the counselor felt that the repeat tester was at low risk, despite testing repeatedly and, as a result, modifying the program.

Other characteristics.—Less commonly, counselors reported other types of client characteristics that required the program to be adjusted. Many of these related to basic demographics or specific client needs (e.g., education level, English as a second language, age, and occupation). For example, one counselor discussed adapting RESPECT with clients based on learning ability and language barriers:

Their capacity to learn, you know. I have several clients that are 38 years old and only have like a 12-, 13-year-old capacity, so you have to do your teaching in other aspects of pictures or whatever, or to use different language that they'll understand (key characteristic adaptation)

In more unusual cases, some counselors reported making adaptations to RESPECT because they felt the clients would not be able to fully engage in the counseling session. For example, one counselor discussed the difficulties of implementing RESPECT with a mentally impaired client:

The [client], I think he was really on drugs. [He] was really out of it ... and could hardly talk or fill out paperwork, and it was a struggle just to even get the paperwork filled out and get through the visit. (core component adaptation)

Client–counselor relationship.—Beyond initial risk and characteristic assessments, counselors continued to make judgments about their clients as sessions progressed to latter components of the program. “Reading the situation,” counselors used feedback and cues from clients to further adapt RESPECT to meet their clients' needs. Counselors tended to adapt RESPECT less and make fewer adaptations to core components when clients were perceived as receptive to the program:

I'm pretty good about, whenever something comes up from the clients, whenever the client's discussing something and they give me something I can use, I pretty much stop whatever else I'm focused on and focus on that moment. (key characteristic adaptation)

Conversely, counselors discussed the difficulty of implementing RESPECT with clients perceived as resistant to the program. In these situations, counselors had the tendency to abbreviate or drop portions of the program:

So, it really comes back to ... the feedback I'm getting from the client. [The client says] "I can at least consider that," or they're like, "Look, I'm just here for a test." Okay. Let's just give you that test ... because I'm clearly not going to be able to get anywhere on this one. (core component adaptation)

As an additional strategy to cope with resistant clients, counselors opted to provide more written information instead of conducting RESPECT personally:

Well, if they are not being receptive, the only thing that I'm doing is give fliers with the information I believe is appropriate for them, and just respect that they don't want to be listening, and give my card ... and be always open to be talking with them. (core component adaptation)

Concurrent Factors

Many instances of adaptations were reported by counselors to be the result of multiple factors. It was evident that counselors were using multiple guidelines of risk, readiness or resistance cues, and context to assess the needs and wants of the clients. They then made adaptations to best fit these concurrent influences. One counselor reported a combination of risk and cues:

The demographics of the individual. The current emotional state of the client.

The knowledge level or age of the client ... motivation to do the step ... or at least perceived willingness of the client to do these things, will definitely modify that.

As a result of combinations of factors, counselors reported making more core component adaptations. For example, one counselor reported the difficulty of conducting RESPECT while testing in bars, even though privacy was ensured:

Sometimes we have to abandon RESPECT. Obviously, not everybody's a fit... . While they may be a fit if they came here to our agency, we also test a lot in the field. And if somebody's out at the bar trying to hook up ... they're not going to want to spend, you know, half hour, you know, talking in the back room. (core component adaptation)

This counselor reflected on the fact that RESPECT was not always appropriate for every situation because of client resistance to counseling despite attempts to improve the privacy of the session. Another counselor reflected on the usefulness of RESPECT with clients who were resistant and with having the requisite amount of time to spend with the client:

So, honestly, with some of the clients, I take it or leave it... . Whenever it's someone who's not major risk-oriented or who doesn't have a lot of risk areas, and

if they are giving me cues, like, they're not really responding well to having their assumptions challenged, and I just work on just asking them a lot more questions. Client response, primarily. And then secondarily, the amount of time that I have to spend with the client. (core component adaptation)

In this case, the counselor resorted to a different form of counseling to better accommodate the needs of the client, rather than continue with RESPECT.

DISCUSSION

Counselors made a number of adaptations to both core components and key characteristics in the daily delivery of RESPECT. Counselors most frequently adapted key characteristics, suggesting that they possess the requisite counseling skills to respond to client needs. However, counselors adjusted core components as the clients or environments deviated more drastically from the ideal environment or the flow of a standard counseling session. Counselors most commonly reported an unusual environment or demands within the counseling session as factors leading to context-specific adaptation of RESPECT. Because counselors could not anticipate the needs, wants, and engagement of the clients when initially coming for counseling and testing, they developed guidelines to help make decisions about clients' needs and how to adjust RESPECT accordingly. These guidelines were sometimes in keeping with CDC protocol, but sometimes a reflection of counselor experience.

Core Component and Key Characteristic Adaptations

Counselors were able to accommodate the majority of factors influencing adaptation while retaining fidelity to the RESPECT program, as evidenced by the fact that most adaptations reported were of key characteristics and RESPECT was delivered as intended. From the perspective of the counselor, key characteristic adaptations (*e.g.*, adjusting for language) would enhance the outcomes of the program for clients by increasing engagement in the counseling process. In other cases, adaptation of key characteristics may have been neutral in its effect on program outcomes. For example, counselors used different strategies for repeat testers (either treating them as they would new clients or building on previous sessions). Because counselors exhibited fidelity to core components with either strategy, neither approach would necessarily hinder program outcomes.

These adaptations provide illustrations to support the literature suggesting that adaptations to key characteristics may facilitate outcomes with clients (Owczarzak & Dickson-Gomez, 2011; Veniegas et al., 2009) or may act neutrally (Elliott & Mihalic, 2004; Kalichman et al., 2007). Our findings also emphasize the need to conduct quantitative effectiveness studies in local contexts to measure the effect of key characteristic adaptations on program outcomes (Rohrbach, Grana, Sussman, & Valente, 2006; Solomon, Card, & Malow, 2006). It will be difficult to infer the value of key characteristic adaptations until their effects on outcomes are assessed.

Some adaptations made to core components would likely compromise program fidelity. Counselors must cope with competing pressures—needs of the client, demands of the

agency, and challenges of the environment—while attempting to maintain program fidelity. The more such competing influences occurred in tandem, the more likely the program counselor was to adapt a core component. In situations presenting multiple demands, counselors often resorted to either abbreviating the counseling session or dropping the program altogether. However, we found many instances in which counselors were able to cope with competing demands while maintaining the integrity of RESPECT.

These findings suggest that adaptation of an intervention may be more nuanced and complex than is reflected by the division of adaptations into strict core component and key characteristic categories; this may be particularly true when the counselor must make context-specific choices within a counseling session. These choices are interconnected with the dynamic of the counseling session, the agency, and the environment in which the counseling session is conducted. While some literature suggests the need for replication studies to assess core components individually to understand the effectiveness of each component separately (Elliott & Mihalic, 2004; Kelly et al., 2000), replication studies are also needed to understand how core components and key characteristics are related to each other. A more comprehensive understanding of such program features is likely to aid researchers in the effort to create interventions more adaptable to the variety of contexts and situations in which they are utilized.

Counseling Skills as an Underlying Assumption for Good Fidelity

Our findings highlight the importance of adequate and quality staffing at the agency level and the utility of successful training as means of improving and maintaining fidelity to evidence-based programs (Gandelman et al., 2006; Hitt et al., 2006). In the examples provided, successful adaptation of RESPECT relied on skills that form the basis of client-centered counseling (Hill, 2009; Nelson-Jones, 2008). Effective communication, listening, motivation around behavior change, and management of client emotions are just some of the skills needed to provide effective counseling. Several key characteristics of RESPECT, such as using open-ended questions and engaging in role-playing with the client, directly coincide with these skills. Given that RESPECT, like many other EBIs, is designed around a counseling model (Iverson et al., 2008; Kalichman et al., 2007; Veniegas et al., 2009), it is imperative that implementers possess the requisite skills to deliver the program with fidelity. In practice, staff members may not have backgrounds in counseling, creating a challenge for implementers, trainers, and program designers alike.

However, we found clear situations where counselors were not able to maintain fidelity to RESPECT, regardless of their skill in adapting the program or delivering counseling. In cases where clients were especially resistant to counseling or mentally impaired, counselors could not deliver RESPECT with fidelity and were therefore unlikely to produce a positive outcome. These findings show the importance of program fit in maintaining fidelity (Gandelman et al., 2006). If the fit between the program design and the characteristics of the agency and target population are poor from the outset, or if these characteristics change over time, then it may be difficult to maintain fidelity to programs.

LIMITATIONS

The present study has several limitations. The design of the study is cross-sectional. We might expect that some counselors have been making adaptations over a long period of time. Thus, program adaptations may be a function of long-term processes or more distant influences than we have accounted for.

Furthermore, while we suggest that adaptations—regardless of whether they are core components or key characteristics—may have effects on the outcomes of the program, we did not measure the effects of these adaptations on outcomes of the program. Longitudinal studies would be useful in this regard. Counselor reports may also be limited by reporting bias. Counselors may be unable to recall all instances of adaptations or be wary of reporting negative adaptations. In such cases, counselors may be overestimating, underestimating, or otherwise inaccurately describing how they would adapt RESPECT when presented with a context that demands adaptation. As with all nonprobability-based samples, generalizability is limited. However, we feel that the richness and in-depth nature of the analysis provides valuable descriptions of how evidence-based programs function in practice.

CONCLUSIONS

The diffusion of effective behavioral interventions for HIV prevention from research into practice remains a challenge given the myriad of influences that lead to adaptation of interventions in real world settings. Our findings provide an initial description of factors that led implementers to adapt programs to accommodate the variable contexts and communities in which providers find themselves. In circumstances where programs are not flexible enough to adequately accommodate this variability, it may be difficult to achieve fidelity.

Our findings highlight the importance of skilled providers for intervention success. The overlap between fundamental counseling skills and successful key characteristic adaptation represents a unique finding of the analysis, suggesting that evidence-based programs may require certain skills among those implementing the program. Thus, when evidence-based programs that rely heavily on counseling skills as a basis for prevention are implemented in local settings, it is important that staff are trained so that they possess the necessary skills sets for successful implementation. Providing more training in basic skills fundamental to program delivery may help to improve fidelity to programs, especially in cases where providers are operating outside the fields in which they have been trained.

Our findings also provide more complex and nuanced insights into the adaptation of core components and key characteristics of programs. Understanding the interplay of different adaptations and their influence on outcomes represents an important area for future research if we are to determine the benefits or hindrances of these adaptations on outcomes.

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Appendix A

Table A1.

RESPECT Core Components and Key Characteristics

Core Components	Key Characteristics
1. Conduct one-on-one counseling using the RESPECT protocol	1. Conduct sessions using open-ended questions, prompting the client to engage actively in the discussion
2. Explore circumstances and context of a recent risk behavior to increase perception of susceptibility	2. Allow the client to identify an achievable risk-reduction step
3. Utilize a teachable moment ^a to motivate clients to change risk-taking behaviors	3. Engage in role-playing with the client to increase the client's self-efficacy to engage in risk-reduction behaviors
4. Negotiate an achievable step that supports the larger risk-reduction goal	4. Provide referrals based on the client's self-identified needs
5. Implement and maintain quality assurance procedures	5. Modify the time needed to complete all of the protocol components, taking cues from client's needs and agency requirements
	6. Provide onsite conventional HIV testing, which will allow the client to attempt to implement the risk-reduction step between sessions
	7. When implemented in non-HIV testing settings, it is recommended that a second session be scheduled for purposes of following up on the attempt to implement a plan

^aTeachable moments are situations or circumstances where the client may have an inconsistency between beliefs and behaviors. When pointed out, the moment can create an opportunity for behavior change.

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