Language Translation for Mental Health Materials: A Comparison of Current Back-Translation and Skopostheorie-Based Methods

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Language Translation for Mental Health Materials: A Comparison of Current
Back-Translation and Skopostheorie-Based Methods

Amelia Kathleen Black

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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ABSTRACT

Language Translation for Mental Health Materials: A Comparison of Current Back-Translation and Skopos-theorie-Based Methods

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Doctor of Philosophy

As mental health professionals seek to disseminate information in many languages in order to meet the needs of an increasingly diverse population, it is important to consider the methods of written translation that the field is choosing to employ. The method chosen for translation can affect the accuracy and usability of the translated text. This study begins with a survey of current literature, the results of which suggest that the most popular translation method in the mental health field is back-translation, a translation method based in the premise that translating a text back into its original English after it has been translated into a second language provides an accurate indication of the success of the translation.

This study then compares back-translation with an alternative translation approach based in skopos-theorie, an area of translation theory that asserts that translational activity should be ultimately grounded in the purpose of the translation rather than the objective equivalency of the source and target texts. Each of the two approaches is applied separately in the translation of the Centers for Disease Control’s handout, “Helping Parents Cope with Disaster,” into Spanish and Chinese. The two resulting target texts for each language are compared in terms of linguistic equivalence by review committees and compared in terms of usability by individuals from the target audiences.

Feedback from reviewers and audience members in both languages suggest that the skopos-theorie based approach to translation may facilitate higher quality translation than back-translation in terms of both equivalence and usability. Suggestions for mental health professionals engaging in translation are then offered, as well as directions for future research.

Keywords: translation, back-translation, skopos-theorie, psychoeducational material, language barrier, cultural barrier
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CHAPTER 1: Introduction

The diversity of cultures and languages within the United States is wide and is constantly expanding—the U.S. Census Bureau data has tabulated that over 300 languages are spoken in the US. According to the 2016 American Community Survey (ACS), at least 65,518,938 people in the US speak a language other than English at home—over 20% of the general population (Gambino, 2017). Though the Census Bureau has not yet released detailed data on languages spoken at home and ability to speak English for the most recent ACS, the most recent available data (Ryan, 2013) indicated that of those who speak a language other than English at home, at least 41.8% (about 9% of the general population) speak English less than “very well.”

As racial and ethnic minority birth rate increases and international migration patterns continue, it is logical to anticipate an increasing number of individuals primarily speaking a language other than English. Furthermore, as the ethnic and cultural composition of the U.S. population changes, the mental health needs of American communities also change (Shrestha & Heisler, 2011). Unfortunately, mental health prevention and treatment efforts addressing these population changes are still lacking (DeCarlo Santiago & Miranda, 2014).

Racial and Ethnic Minorities and Mental Health

In the US, despite immigration-related factors that may contribute to an increased amount of stress and a heightened risk for mental health difficulties, proportionally fewer racial and ethnic minorities seek mental health services in comparison to non-minority populations (Smith & Trimble, 2015). Indeed, according to the Surgeon General, “disparities in mental health services exist for racial and ethnic minorities, and thus, mental illnesses exact a greater toll on their overall health and productivity” (Department of Health and Human Services, 2001, p. iii). More specifically, the National Alliance on Mental Illness estimated that in 2012, Asian
Americans utilized mental health services at approximately one-third the rate of White Americans, while African Americans and Hispanic/Latino/a Americans utilized mental health services at about half the rate of White Americans (2013). More recently, a meta-analysis of racial and ethnic minority mental health service utilization in the US and Canada (Smith & Trimble, 2015) suggested that Asian Americans have the lowest rate of mental health service utilization (51% lower than White/European Americans) followed by Hispanic/Latino/a Americans (25% lower than White/European Americans) and African Americans (21% lower than White/European Americans). These statistics point to a problematic racial disparity in those who seek and/or receive mental health services.

**Barriers Affecting Racial and Ethnic Minority Mental Healthcare**

Unfortunately, a variety of barriers reduce the likelihood that racial and ethnic minority individuals will seek or receive appropriate mental health care and resources. Barriers to seeking mental health care include cultural stigma related to mental illness, mistrust of the dominant culture, low educational background, low socioeconomic status, insecure living conditions, lack of family and social support, and low level of acculturation (Gary, 2005; Johnson & Cameron, 2001; Miranda, Lawson, & Escobar, 2002; Scheppers, van Dongen, Dekker, Geertzen, & Dekker, 2006).

Other barriers to receiving appropriate mental health services include lack of appropriate resources in rural areas and impoverished communities, lack of culturally specific instruments and subsequent risk of misdiagnosis, differences in health beliefs between patients and providers, lack of financial resources, and lack of adequate health insurance (Johnson & Cameron, 2001; Miranda et al., 2002; Scheppers et al., 2006). These barriers must be addressed in order to effectively attend to the mental health needs of the diverse U.S. population.
Language as a Barrier to Racial and Ethnic Minority Mental Healthcare

One of the most significant barriers to mental health services for racial and ethnic minorities is language (Aboul-Enein & Ahmed, 2006; Brach, Fraser, & Paez, 2005; Garcia & Duckett, 2009). In fact, language presents “the most common barrier in any health care setting and has been found to be a risk factor with adverse outcomes” (Aboul-Enein & Ahmed, 2006, p. 168). Unfortunately, bilingual mental health professionals and resources are limited in the US, forcing the majority of individuals seeking mental health resources to do so in English. Consequently, individuals with limited English proficiency are less likely than proficient English speakers to seek and receive preventative and critical healthcare services, including mental health care services (Brach et al., 2005). Because of the major communication barrier, those who do seek mental healthcare services are further challenged in developing a therapeutic and close working relationship with an English-speaking service provider (Aboul-Enein & Ahmed, 2006).

Lack of English speaking and reading skills can prevent individuals from accessing vital mental healthcare resources such as screenings, education, therapy, or other supportive treatment. Even individuals who speak English well enough to converse and interact with others in their daily lives may benefit from access to resources in their primary language, particularly in terms of length of treatment and outcomes (Lin, 1994; Sue, Fujino, Hu, Takeuchi, & Zane, 1991; Sue, 1998). In the absence of an adequate number of bilingual mental health professionals, many mental health professionals turn to the assistance of interpreters in order to work with non-English-speaking individuals. Indeed, federal law mandates the use of interpreters if needed to ensure equal access to health care services (Searight & Searight, 2009). The American Psychological Association’s (APA, 2002a) Ethical Standards require psychologists who use the services of interpreters to ensure their competency. While helpful in allowing monolingual
mental health professionals to more fully address the needs of linguistic minority clients, reliance on interpreters raises a number of potential ethical concerns due to interpreter substitution, omission, or editorialization of statements made by both the professional and the client. These concerns may include misdiagnosing mental health problems, misunderstanding aspects of patient history, or miscommunicating treatment instructions or advice (Flores et al., 2003; Searight & Armock, 2013).

While it is important to address the spoken language gap in mental health by increasing the number of bilingual mental health professionals, efforts to recruit such professionals have yet to yield the desired results (Aguilar-Gaxiola, S. et al., 2012; Dingfelder, 2005). Use of interpreters continues to be the main approach to addressing language differences despite potential problems with the interpreter model (Searight & Armock, 2013). In addition to the spoken language gap, a sizable gap exists when it comes to written language that communicates information regarding physical and mental health issues (Aboul-Enein & Ahmed, 2006; Garcia & Duckett, 2009)

**Multicultural Practice Guidelines**

Recent research provides a foundation for numerous recommendations regarding the need to increase clinical multicultural competence among mental health practitioners as well as the need to make services more visible, accessible, and relevant to a multicultural population (Arredondo & Toporek, 2004; Benish, Quintana, & Wampold, 2011; Chowdhary et al., 2014; Griner & Smith, 2006; Hall et al., 2016; Huey & Polo, 2008; Smith, Rodriguez, & Bernal, 2011, 2015). In 2002, the American Psychological Association (APA, 2002b) adopted six guidelines addressing the issues associated with multicultural mental health services. The guidelines on multicultural education, training, research, and organizational change for psychologists detail the
importance of recognizing personal bias and cultural assumptions, developing multicultural knowledge and understanding, conducting culture-centered research, and applying culturally appropriate skills in applied practice (APA, 2002b). These guidelines provide important criteria for evaluating efforts to reduce language barriers. Several of these guidelines and their relevant premises are reviewed in the following paragraphs.

The first guideline for multicultural practice holds that psychologists should seek an awareness of their own cultural attitudes and beliefs. With this personal awareness, they should then consider how their attitudes and beliefs influence their interactions with others from culturally different backgrounds. According to this guideline, cultural biases can lead to miscommunication, stemming from differences in normative behavior across cultural contexts. Therefore, it is important to address language barriers in a way that encourages cognizance of the sender’s personal attitudes and beliefs, as well as an awareness of how these attitudes and beliefs influence communication and interact with the receiver’s cultural context. Considering these complexities, ultimately, the sender’s message may not be perceived in the same manner in which it was originally intended.

The second and fourth multicultural guidelines encourage psychologists to recognize the importance of not only multicultural knowledge, but also multicultural sensitivity and understanding. The second guideline stresses the premise that “greater knowledge of, and contact with, the other groups will result in greater intercultural communication and less prejudice and stereotyping” (APA, 2002b, p. 1).

The fourth guideline addresses ethical considerations and the importance of cultural sensitivity when conducting psychological research. This guideline suggests that collaboration with community members and potential participants increases the benefits of research as well as
strengthens the credibility and trust of mental health professionals in racial and ethnic minority communities. Likewise, collaboration with members of the receiver group may be key in establishing effective methods of transferring mental health information across language barriers.

The fourth guideline also encourages researchers to be knowledgeable about the linguistic equivalence of translated research instruments, but also the functional equivalence or equivalence of meaning and function across cultures. This highlights two basic aspects of translation quality—(a) equivalence or fidelity of language and (b) equivalence or coherence of meaning and usability. Usability is defined as the ease with which individuals are able to use a product to achieve their goals (Suojanen, Koskinen, & Tuominen, 2014).

The fifth multicultural guideline states that psychologists should use culturally appropriate skills in applied practice. These skills should be attuned to the cultural diversity of clients and should “incorporate understanding of clients’ ethnic, linguistic, racial, and cultural background” (APA, 2002b, p. 1). The APA (2002b) guidelines also state that “this may include respecting the language preference of the client” and prioritizes accurate translation of documents (p. 1). Thus, the accurate language translation of mental health documents for research as well as applied practice is an ethical obligation.

**Translation of Written Mental Health Resources**

Comprehensive and accurate cross-cultural research, assessment, and education all require materials available in languages other than English (Johnson & Cameron, 2001; Miranda et al., 2002). Addressing the written language gap in mental health is not only helpful in increasing the availability of multi-language written materials, but is also helpful in opening educational opportunities that are traditionally delivered through oral means, such as psycho-education, parenting, or preparedness workshops. Culturally and linguistically appropriate
written educational materials have the potential to not only provide needed information, but also the potential to reduce stigma associated with mental health concerns and help-seeking. Although not a replacement for bilingual mental health professionals, high quality translated written materials assist in closing the language gap that exists in the mental health arena.

**Back-translation.** An appropriate language translation and adaptation is necessary in order to produce effective, high quality written resources. One popular approach to current translation within the mental health field is *back-translation*, a methodology that is traced back to Brislin (1970). Brislin argued that the process of taking a translated target text and translating it back to the original source language to compare to the original source text provides an indication of translation fidelity sufficient to ensure translation quality. Back-translation assumes that equivalence between source and target text is the fundamental aim of language translation.

Despite the fact that the back-translation methodology was popularized over 45 years ago, mental health researchers have noted it as the most common persisting methodology used to translate mental health materials (Barger et al., 2010). Back-translation is often referenced along with the concept of *decentering*, an adjunct process to back-translation described by Brislin as a way to increase the likelihood of translation success (Brislin, Lonner, & Thorndike, 1973; Werner & Campbell, 1970). Decentering allows translators to consider the importance of the target text to be equal to the source text by allowing modification of the source text during the process of translation. This is meant to facilitate equivalence between source and target texts by allowing both to influence translational decision making as well as allowing the target language and culture to influence the final draft of the source text. However, decentering is impossible to utilize when the source text has already been written and is not open to revision.
Several additional potential disadvantages or shortcomings of back-translation have been identified. For example, a translation may be assumed equivalent, when, in fact, the equivalence indicated by the back-translated text is not true equivalence due to problematic translation that may not be identified during the translation process (Brislin et al., 1973). Indeed, despite the weight back-translation places on equivalence, back-translation cannot truly guarantee equivalence, particularly when many of the terms associated with mental health are extremely difficult or even impossible to translate directly (Barger et al., 2010; Goddard, 1997).

**Skopostheorie-based translation methodology.** Despite the popularity of back-translation in the mental health field, it is imperative to examine whether this methodology fits within the recommendations and intentions suggested by those encouraging increased multicultural competence in working with culturally diverse others. More specifically, translation for mental health materials should be consistent with clients’ multicultural background and context, and should not assume the target text audience’s worldview to be identical or inferior to that of the source text audience. Back-translation elevates the source text and equivalence to it as the ultimate authority in the translation process.

Conversely, functional translation theory approaches assume that “different situations call for different renderings” of the source text (Nord, 1997). One such theory, skopostheorie, applies skopos, or purpose, as the fundamental principle driving translation (Baorong, 2009; Vermeer, 1989/2000). In other words, the translation approach to any given text should be driven by the intention behind the text, rather than full fidelity to either the word-for-word structure or the extralingual communicative effect of the text (Jabir, 2006).

Considering the increasingly large population of individuals who could benefit from mental health materials in their primary language, it is imperative to determine a method of
language translation that prioritizes the target audience’s world view. The principles of skopostheorie offer new possibilities for conceptualizing and carrying out translation in the mental health field, and should be compared to current translation methods in order to inform best practice standards for translation of mental health materials.

**Research Questions**

Although several researchers have suggested that back-translation is the methodology of choice for contemporary mental health translation needs, the exact details of current translation activity in the field are not specifically defined. Thus, the initial question we should consider regarding translation in the field of mental health is: (1) Which translation methodologies are currently being reported in the mental health research literature? More specifically, is the majority of translation in the field produced using a back-translation technique, as suggested by previous research? What other methodologies, aside from back-translation, are being reported? Additionally, it is important to know who participates in translation work, specifically their qualifications and preparation to conduct translation.

Next, if we are to continue using a back-translation methodology in mental health, it is important to examine the methodology in the context of the APA guidelines on multicultural practice (APA, 2002b). These guidelines are important to consider, since translation is, at its core, a multicultural and multilingual endeavor with profound implications for the growth and development of the mental health field on a global scale.

In this study, we seek to compare the quality of translations produced using two methods of translation, the popular back-translation methodology and a newer skopostheorie-based methodology. Based on the APA multicultural guidelines, we define quality as linguistic equivalence, or fidelity; and equivalence of meaning and function, better defined as coherence
with the user’s context. Thus, to evaluate quality, we pursue two lines of inquiry, hereafter referred to as the second and third research questions respectively: (2) How do target text versions of a brief mental health handout—the Centers for Disease Control’s *Helping Parents Cope with Disaster*—compare to the original source text in terms of linguistic equivalence when produced using each of the abovementioned translation methodologies? (3) According to sample members of the target audience, which translated version of the target text is more coherent and aligned with their own cultural context?
CHAPTER 2: Literature Review

Within the United States, the population of minority races and ethnicities is growing rapidly; according to the most recent census data, racial and ethnic minorities currently comprise 37% of the population, a percentage that is projected to grow to 57% by 2060. According to current Census Bureau projections, the United States will become a majority-minority nation, with no single racial group making up a majority of the population, by 2044 (Colby & Ortman, 2015).

Language Diversity and Mental Health

Such significant racial and ethnic minority growth is due to two main factors—the first of which is a rising racial and ethnic minority birth rate juxtaposed with a falling non-Hispanic White birth rate. Between 2000 and 2009, the number of racial and ethnic minority children increased from 38 to 44%, with children of immigrants representing the fastest growing sector of the U.S. population (Fortuny, 2011). The second factor contributing to the changing racial make-up of the United States is the rate of international migration, which is projected to exceed the United States rate of natural increase by 2050, thus becoming the principal driver of population growth in the United States for the first time since 1850 (U.S. Census Bureau, 2013).

Rapid racial and ethnic minority growth brings with it a rapid change in the landscape of language usage in the United States. According to recent data from the U.S. Census Bureau, over 20% of the general population in the United States speak a language other than English at home, with at least 41.8% of those individuals speaking English less than “very well” (Ryan, 2013). In other words, there is, at a minimum, an estimated 9% of the general United States population that primarily speak a language other than English, while speaking English less than very well.
This puts a sizable portion of the population at a disadvantage for receiving general and mental health education, resources, and treatment, all of which are provided primarily in English in the United States (Brach et al., 2005; Peters, Sawyer, Guzman, & Graziani, 2013). Combining language barriers with any potential predisposition for mental health concerns an individual may have coupled with the experience of potential stressors due to immigrating or living in the United States as an ethnic minority results in an even greater need for culturally and linguistically appropriate mental health services (Pernice & Brook, 1996; Quesada, 1976).

**Immigration and mental health.** It is important to note that there is not a singular generalizable pre- and post-immigration experience shared by all immigrants. Reasons for immigration as well as experiences moving to the United States are widely varied and extremely diverse (Berk, Schur, Chavez, & Frankel, 2000). Factors that help determine an individual’s experience with immigration include whether or not the relocation was voluntary, geographical distance traveled, legal classification (i.e., whether or not the individual is considered an illegal immigrant), whether or not they are accompanied by family, employment status, and availability of community social support (Bhugra, 2004). Additionally, even in cases where immigrants face similar stressors, this stress will have different effects on different individuals, and will result in a variety of responses (Bhugra, 2004).

However, despite a wide range of individual differences, there are a number of common immigration experiences that are likely to cause significant amounts of stress and thus represent risk factors for the development of depression, anxiety, and other mental health concerns (Pumariega, Rothe, & Pumariega, 2005). Individuals who flee their home countries due to personal danger or fear of persecution and seek refugee status or asylum elsewhere may face significant amounts of stress due to challenges such as finding housing and employment,
adjusting to a new social context, and struggling to feel welcome in the new society and culture in which they live (Beiser, Turner, & Ganesan, 1989; Pumariega et al., 2005). Immigrants living undocumented in the United States may experience greater amounts of emotional distress stemming from worries that they could potentially be discovered as undocumented and deported, as well as both acute and chronic forms of stress due to criminal victimization, oppressive work conditions, and separation and isolation from family (Cavazos-Rehg, Zayas, & Spitznagel, 2007).

Immigration to a new country often means leaving loved ones behind, thus weakening an individual’s social support structure (Chalungsooth & Schneller, 2011; Pumariega et al., 2005). Social support has overwhelmingly been shown to be of critical importance in mental health, serving as a protective factor for preventing or minimizing conditions such as depression and alcoholism, as well as aiding in and accelerating the recovery process (Bovier, Chamot, & Perneger, 2004; Cobb, 1976; Thoits, 2011). Chalungsooth and Schneller (2011, p. 181) noted that the experience of homesickness is common for international students, who miss family and friends in addition to the familiarities of their culture, such as “traditions, holidays, ethnic food, and other comforts of home.”

Whether or not an individual migrates with her or his family or a group, is living in a community that shares his or her culture, is able to maintain communication with loved ones who are back in the country of origin, and is able to acculturate to some degree and feel comfortable in their new society are all factors that may influence an individual’s sense of social support (Bhugra, 2004; Sullivan & Rehm, 2005). In addition to serving as a protective factor when present, lack of social support has been implicated in increased mental illness in immigrant populations (Kinzie, 2006; Maddern, 2004).
Motivation to migrate is also critical to understanding the mental health risk factors of migration. Reluctance to migrate or being forced to migrate involuntarily is associated with high levels of mental health problems (Bhugra, 2004; McKelvey, Mao, & Webb, 1993).

Children separated from a parent due to the parent’s deportation often experience mental health concerns such as problems with externalizing and internalizing behaviors (Adhikari et al., 2014). Even children who remain with their parents may be particularly emotionally and psychologically vulnerable—parents may be overwhelmed by the stresses and dangers that may accompany aspects of immigration, such as legal status, traumatic or dangerous travel, or detention in a refugee camp (Pumariega et al., 2005), and thus be unable to fully attend to their children’s emotional needs.

In addition to complicating the process of receiving services for mental health concerns, a lack of local language skills presents a significant barrier to academic success for international students (Chalungsooth & Schneller, 2011; Mori, 2000; Pedersen, 1991), and struggling academically may lead to increased emotional distress (Dusselier, Dunn, Wang, Shelley, & Whalen, 2005; Khawaja & Dempsey, 2007).

Some researchers have suggested that immigrants may in fact have better mental health than U.S. born Americans (Escobar, Hoyos Nervi, & Gara, 2000); this may be because individuals who self-select emigrate are healthier and more highly educated than those who do not emigrate (Mollica, Chernoff, & Lavelle, 2013). However, there is increasing support in the literature that immigration may be associated with higher levels of stress and mental health concerns. PTSD, depression, anxiety, or associated post-trauma features may occur more frequently in immigrants who were victims of or witnesses to violence, violation or other traumatic events either in their country of origin or during the process of immigrating and
settling in the United States (Craig, Jajua, & Warfa, 2009; Fenta, Hyman, & Noh, 2004; Hermansson, Timpka, & Thyberg, 2002; Kinzie, 2006; Maddern, 2004; Pernice & Brook, 1996; Pumariega et al., 2005). Although the research in the area of migration and psychopathology is lacking, it is reasonable to assume that increased stress related to immigration could play into the development of mental health distress (Ingram & Luxton, 2005).

**Current Prevailing Translation Methodologies in Mental Health**

Research in the area of translation methodology has been largely overlooked in the mental health field. Goddard (1997) explains this dilemma:

Social scientists often regard the problem of translation as a mere methodological nuisance—as something to be ‘gotten around’ so that they can move on to implementing familiar research techniques—rather than as a profound epistemological and conceptual issue deserving of sustained and focused attention. (p. 153)

**Research on interpretation.** Despite the lack of literature on language translation for mental health materials, the issues of translation can be assumed to be similar to those identified in mental health interpretation work, on which there is some existing research (Baxter & Cheng, 1996; Corona et al., 2012; Miller, Martell, Pazdirek, Caruth, & Lopez, 2005; Molle, 2012; Searight & Armock, 2013; Tribe & Tunariu, 2009). Although interpretation concerns spoken language while translation concerns written language, many of the linguistic, ethical, and professional training issues are the same since both activities are concerned with the transfer of various types of information by exchanging words in one source language for words in another target language.

One of the primary issues surrounding mental health interpretation is that of interpreter qualification and the effect that inaccurate interpretation can have on the quality of mental health
services received by non-English speaking individuals. The words that interpreters choose to use in relaying what a client or patient is saying, as well as what details interpreters choose to emphasize, summarize, substitute, or eliminate in their interpretation can strongly influence psychiatric diagnosis and treatment (Flores et al., 2003; Searight & Armock, 2013). Likewise, the words chosen by translators can effect subtle or even drastic changes to the meaning and purpose of the text.

Untrained interpreters such as client family members are often used in lieu of trained professional interpreters due to their comparative availability (Corona et al., 2012). However, relatives serving as interpreters may distort both clinician statements or questions and client responses due to lack of linguistic skills, lack of knowledge around mental health issues, or a desire to minimize concerns and protect their loved one (Flores et al., 2003; Marcos, 1979; Searight & Armock, 2013).

The goal of the interpretation or translation is paramount to understanding how to approach the work; but even professionally trained interpreters may be unclear on the role that they are to assume while interpreting. Searight and Armock (2013) describe mental health interpreters as potentially existing anywhere on a continuum where one extreme is converting the spoken language verbatim—the “black box approach”—and the other extreme is acting as an advocate for the client, even advising the client on how to proceed in treatment. This is not an incidental issue, as the role that interpreters, as well as translators, assume has an effect on the information that is exchanged and ultimately the outcome of mental health service delivery.

**Back-translation techniques in mental health service materials.** Back-translation has been the popular translation methodology in mental health since it was popularized by Brislin in 1970 (Barger, Nabi, & Hong, 2010). The basic principle of back-translation is taking a source
text, translating it into the target language, and then having a second translator or set of translators translate the target text back into the source language. The original source text and the back-translated text are then compared to ensure that they match. The greater the matching between the two source language texts, the higher the fidelity and quality of the translated target text is assumed to be (Brislin, 1970). Thus, back-translation is built upon the assumption of equivalence. A large part of back-translation’s popularity has likely been due to the straightforwardness, speed, and ease with which it can be implemented in a variety of contexts (Barger et al., 2010).

**Decentering.** In general, the literature on translation methodology that is most frequently cited in the mental health field is largely based on the foundation laid by Brislin (1970). Aside from describing the basic template for employing a back-translation methodology, Brislin also recommends the process of decentering (Werner & Campbell, 1970). Rather than treating the source text as static and unchangeable, decentering is the process of treating the source and target texts as equally important, and allowing modification to the source text during the translation process in order to achieve equivalence between the two texts. Brislin, Lonner, and Thorndike (1973) identify decentering as contributing to the successful use of back-translation in several studies. While much of the literature on translation that is currently cited in the mental health field references decentering (Brislin, 1980; Carlson, 1997; Cha, Kim, & Erlen, 2007; Hui & Triandis, 1985), it is important to note that it is impossible to use this technique on pre-existing source texts that are not open to modification. Therefore, decentering, as well as other strategies such as adding redundancy and context to the text (Brislin, 1970), are only viable when the source text and target text(s) are under development simultaneously (Hambleton, 2005), which is often not the case.
Disadvantages of back-translation techniques. In addition to setting forth the advantages of back-translation, Brislin (1970) also identifies three potential pitfalls of back-translation in establishing equivalence between the source and target texts. Specifically, the back-translated text may support equivalence between the source and target texts despite problematic translation when: (a) the forward and back translators share a set of rules for translating words or phrases that are not truly equivalent; (b) the back-translator is able to infer what is meant by a poorly translated target text and reproduce the source text; or (c) the forward translator retains the grammatical structure of the source language in the target text, thus making it easy to back-translate while simultaneously making it incomprehensible or awkward to monolingual target language speakers. For these reasons, and despite his strong support of the use of back-translation, Brislin states researchers often erroneously rely solely upon the usage of back-translation, and that multiple translation methods should be used in any given translation project in order to draw upon the strengths and account for the weaknesses of each (Brislin et al., 1973).

Therefore, in addition to back-translation, Brislin et al. (1973) suggested using one of three other translation techniques in order to ensure the equivalence of source and target texts. First, a researcher may administer both the original source and translated target versions of a test to a sample of bilingual individuals in order to see if the responses are different, thereby theoretically suggesting nonequivalence. Second, a researcher may use a pretest technique such as a random probe (asking test takers to explain their thought process in responding to specific items on a test) or asking test takers to rate the clarity of items on the translated test. Third, a researcher may choose to use a committee approach to forward translation, wherein at least two or three translators produce independent forward translations and then compare the three translations before engaging in back-translation.
Indeed, the majority of cited translation methodologies in the mental health field use at least one of these three techniques in addition to back-translation. Several researchers reported using a form of committee approach in addition to back-translation. In some cases, multiple translators were used only for the forward translation (Wang, Lee, & Fetzer, 2006), while in others, multiple translators were also used for the back-translation (Bullinger et al., 1998; Cha et al., 2007; Guillemin, Bombardier, & Beaton, 1993). Additionally, many researchers used a bilingual review committee to review the directions and items of their translated assessments to determine whether further modifications or regional changes should be added (Bracken & Barona, 1991; Bullinger et al., 1998; Cha et al., 2007; Guillemin et al., 1993). Last, several researchers reported using a pretest strategy, such as using a probe technique with community members in addition to back-translation (Carlson, 1997; Guillemin et al., 1993), or using bilingual individuals to respond to and rate the equivalence of source and target versions (Guillemin et al., 1993; Sperber, 2004; Wang et al., 2006).

Other techniques that were reported in the literature include: having native speakers mark words or phrases in the target text that sounded strange, awkward, or uncommon before the text was back-translated (Wang et al., 2006); having translators rate and comment on the difficulty of translating each item of a test (Bullinger et al., 1998); having translators not involved with the forward translation rate said translation on clarity, common language use, and conceptual equivalence in order to inform modification (Bullinger et al., 1998); or specifically using a mix of translators who were and were not familiar with the objectives of the material being translated in order to help elicit different viewpoints and interpretations in the translation process (Guillemin et al., 1993).
Equivalence in back-translated texts. Brislin (1970) also sets forth five criteria or strategies for achieving equivalence, since back-translation is based entirely on the assumption that equivalence is king. Indeed, a key question that must be asked surrounding whether back-translation is an appropriate methodology for the mental health field is whether equivalence is the ultimate criterion of translation quality. Clearly, equivalence is an important component of competent translation; however, the amount of weight it should be given should be questioned.

Additionally, as noted by Goddard (1997), back-translation, though intended to ensure equivalence of meaning between source and target text, cannot truly guarantee that equivalence. Rather, it is only able to indicate whether the terms being used are “the closest single-word equivalents (or near-equivalents) available in the various languages (p. 155).” In fact, the goal of finding closest single-word equivalents can be problematic in and of itself, as many important terms in mental health, such as labels for affective states, are extremely difficult to translate directly, given the lack of direct translations available, the nuances of the evolution of language, and the considerations of popular usage of specific terms (Barger et al., 2010).

The problems posed by semantic differences are particularly pertinent for cross-cultural psychology; the dialogue of therapy, process of written or verbal assessment and diagnosis, and transfer of psychological education and information are all mediated by language (Goddard, 1997). In particular, cross-cultural research may be complicated by the assumptions underlying back-translation, as research relies heavily on an assumption of precise translation in order to claim validity for translated measures being used. Back-translation is assumed to result in precise and faithful translation that will be easily understood by the target population, and yet there is evidence that this may not be the case (Barger et al., 2010; Goddard, 1997; Kayyal & Russell, 2012; Postert, Dannlowski, Müller, & Konrad, 2012; Russell, 1991). This brings into question
the robustness and reliability of research built on the foundation of back-translated materials, particularly when back-translation is used without any other technique.

**Alternative translation methods currently in use.** Though the majority of recently cited researchers suggest back-translation, one researcher (Geisinger, 1994) eschewed back-translation in favor of a single forward translation that was then reviewed by a group of individuals either in a review meeting, through individual reviews, or through a combination of approaches. Ideally, Geisinger (1994) suggests that the individuals on the panel review the translation separately, respond with written comments, and then meet together to consider and reconcile differences of opinion. The translator may be involved in the review meeting in order to explain the reasoning behind the original translation.

**Skopostheorie and Functional Translation**

Skopostheorie is a functional theory of translation that was introduced by Hans Vermeer in 1978. Functional theories of translation are a category of theories that place great emphasis on the function of the translational action. In other words, functional translation theories reject the notion that the source text is the ultimate authority in the translation process, but rather look to the purpose of the translational action for guidance on how to proceed (Jabir, 2006).

The basic principle of skopostheorie is that translation or any translational action is a sort of “purposeful activity” and should employ methods and strategies determined by the purpose (or skopos) of the translational activity. The purpose of the translational activity is determined by the individual or institution commissioning the translation, and the appropriate method for producing a target text achieving that purpose is negotiated with the translator of the text. From a skopostheorie perspective, the deciding factor in selecting a method for translation is always the skopos, rather than the source text itself (Baorong, 2009; Vermeer, 1989/2000).
In the case of skopos theory, the term function refers to the meaning of the text as viewed by the receiver of the text, rather than the intention or purpose of the sender (Nord, 1997). Because of the differences that exist between the cultures and contexts of the sender and the receiver, there may also be differences between the function of the text in the source culture and the function of the text for the receiver (Jabir, 2006). Inappropriate translation that does not take the purpose of the translational action as well as the accompanying cultural issues into account may result in a disconnect between the intention behind the text for the sender and the function of the text for the receiver.

**Skopos theory and translation methodology.** Skopos theory does not presuppose a specific or narrowly defined translation methodology. However, back-translation methodologies run the risk of being incompatible with skopos theory because they place the translational power in the source text. The comparison of the translated target text to the source text as the ultimate evaluation on the adequacy of the translation places the translational authority in the source text. In the case of non-literary texts, skopos theory prioritizes the conceptual or informational content of a text over the linguistic form or style (Reiss, 1971/2000). Many of the source texts eventually translated into additional target languages are not written with their eventual translation or the eventual target audiences in mind (Vermeer, 1989/2000). Therefore, employing a strategy such as back-translation, which strives to match the linguistic form of the target text as closely as possible to the source text, ties the target text to a structure originally intended for a language and culture that is potentially very different than that of the target audience (Nord, 1997).

As Vermeer describes, purpose is determined in large part by the target audience:

In the framework of this theory, one of the most important factors determining the purpose of a translation is the addressee, who is the intended receiver or audience of the
target text within their culture-specific world-knowledge, their expectations and their
communicative needs. Every translation is directed at an intended audience, since to
translate means ‘to produce a text in a target setting for a target purpose and target
addressees in target circumstances. (Vermeer, 1987, p. 29)

Because the target audience plays such an important role in the translation process, it is
imperative that the target audience be clearly identified and their needs and cultural framework
considered. Definition of the target audience is key to specifying the skopos of a translation.

**Skopostheorie and equivalence.** Skopostheorie is a translation theory based grounded in
the assumptions of functionalism. It assumes that whether or not it is clear for a particular text,
each translation has a purpose, or skopos, and this should exert the greatest influence on the
translator’s decisions about methodology (Chesterman, 2010; Nord, 1997). Skopostheorie also
assumes that “language is embedded in culture” (Chesterman, 2010, p. 209) and as such,
translation represents not only the linguistic transfer of information, but also a cultural transfer
(Reiss & Vermeer, 1984/2014). This is contrasted with word or sentence level equivalence-based
approaches to translation, such as back-translation, where translation is viewed as a code-
switching operation, or rather, the source language is simply replaced with the closest equivalent
receptor language.

Skopostheorie does not preclude word or sentence level equivalence as a goal of
translation; there are many possible aims for translational action that necessitate translation that
is as literal as possible (Jabir, 2006). Skopostheorie merely makes the type of equivalence sought
a piece of the translational puzzle contingent upon the ultimate aim of the text.

**Skopostheorie and successful translation.** From a skopostheorie perspective,
translational success can be judged according to two main rules: the coherence rule, which states
that the target text “must be interpretable as coherent with the [target text] receiver’s situation” (Reiss & Vermeer, 1984/2014, p. 113); and the fidelity rule, which states that there must be coherence between the information in source text, the translator’s interpretation of the source text, and the information the receivers get from the target text (Munday, 2008). In terms of hierarchy, the coherence rule supersedes the fidelity rule, and both rules are subordinate to the skopos of the translational activity. This means that although important, the source text is not the ultimate authority in the translational process (Munday, 2008).

Simply providing a translator with the source text and expecting that translator to produce an appropriate and effective translation is problematic. Source texts rarely provide adequate instructions about how they are to be translated (Nord, 1997). Therefore, it is important to supplement the source text with additional critical information about the skopos of the translation. This information is contained in what Nord (1997) describes as a ‘translation brief.’ Translation briefs are given to the translator by the entity commissioning the translation, and should contain information about the intended function of the text, the target audience, the intended time and place where the target text will be received, the medium of transmission of the text, and the motive for the production and/or the reception of the target text (Nord, 1997). Each of these pieces of information provides important context for the translation.

A critical component to evaluating the success or effectiveness of a translation is to compare the target audience’s reception or interpretation of the target text with the original translation commission, or brief—particularly the components of the brief specifying the intention behind or skopos of the translational activity (Munday, 2008; Nord, 1997). The translation brief should include both the goal of the translation, as well as any relevant conditions under which the stated goal of the translation should be met (Munday, 2008).
According to Reiss and Vermeer (1984/2014) successful translation results in the target audience interpreting the target text in a way that is compatible with the intention of the translation’s commissioner, or the sender. Recent work in the area of user-centered translation, a concept which seeks to apply the ideas of skopos-oriented translation, suggests that the same methods used in academic reception research can be used to evaluate the receivers,’ or users,’ experience with the target text (Suojanen, Koskinen, & Tuominen, 2014). Understanding the experience of the target audience in reading or using the translated text can reveal the effectiveness of the translation. Questionnaires, focus groups, think-aloud techniques, or interviews intended to elicit information about opinions about the target text, experience reading or using it, and comprehension of the content in the text can all be useful in appraising whether the intention of the sender or commissioner of the translation has been met.

Back-translation relies on the assumption that high quality translation work can be identified through the process of reversing a translation. However, as noted by Chesterman (2010, p. 209), skopostheorie explicitly assumes that “translations are not normally reversible; and a given source text has many possible [viable] translations.” This is one of the major points of departure between a back-translation approach based on traditional word-for-word fidelity assumptions and functional theories such as skopostheorie.

Nord (1997) identifies four types of translation errors. The first type of error, pragmatic error, represents “inadequate solutions to pragmatic translation problems” (Nord, 1997, p. 75), such as the failure to fully take into account the orientation of the audience, or to recognize the audience of the target text can differentiated in meaningful ways from the audience of the source text (Nord, 1997) and thus failing to remove information in the source text that is redundant or
irrelevant, or failing to include important information that is implied in the source text (Baorong, 2009).

Although many researchers cite review by a native speaker or pilot testing with many target language speakers as being sufficient to catch any remaining errors or problematic aspects of the translation that were not resolved in the stage where the forward and back-translations were compared with one another, Nord (1997) states that pragmatic errors are generally not easily identified by reviewing the target text alone, even when the review is done by a native speaker from the target audience. Rather, pragmatic errors are best identified by “a person with translational competence comparing the source and target texts in the light of the translational brief” (Nord, 1997, p. 76).

The second type of error, cultural translation error, represents an “inadequate decision with regard to reproduction or adaptation of culture specific-conventions” (Nord, 1997, p. 75). Cultural translation errors occur when translators include language in the target text that conflicts in some way with the target culture, causing the target text to be in some way incomprehensible or off-putting to the target audience (Baorong, 2009).

The third type of error, linguistic translation error, represents an “inadequate translation when the focus is on language structures” (Nord, 1997, p. 75) and include any kind of linguistic mistake such as syntax, word choice, punctuation, tense, etc. (Baorong, 2009). These errors generally occur due to lack of adequate competency in the translator’s training in either the source or target language (Nord, 1997).

The fourth type of error, text-specific translation error, represents translation problems specific to the source text’s intended function (Nord, 1997) and may occur when the intended
primary function of the text is overshadowed by, or given lower priority than, other, secondary functions of the text (Baorong, 2009).

Comparison of the source and target texts in the context of the translation brief for the purpose of identifying translational errors differs from back-translation in several key ways. First, the reviewer in this case should be someone with translational competence, while in the back-translation model, the comparison of the back-translated and source texts is not necessarily performed by a qualified translator. Second, the two comparison processes use different documents. Nord’s functional approach involves comparing the target or translated text to the original source text, while the back-translation approach involves comparing the back-translated version of the target text to the original source text. Third, the back-translation process involves not only the translation of the source text into the target language, but also the translation of the target text into the source language. Thus, the back-translation process involves two separate translational actions, the second being subject to the same risks of errors and mistakes as the first. When discrepancies or errors are found in the comparison of the back-translated text with the source text, the assumption is that this indicates an error or problem with the target text (Brislin, 1970), and it becomes difficult to identify which translational activity was actually the source of the error.

Although there may be significant pressure to train or prepare translators as quickly and with as few resources as possible, and despite the majority of translations being completed by untrained bilinguals, there is some evidence that including functional translation theory in translator training may increase the quality of translations that those translators produce (Farahzad, 2010; Gile, 1991).
CHAPTER 3: Method

In order to answer the first research question and present a clearer picture of the prevailing translation methodologies in mental health as they are currently being reported in the literature, we conducted a survey of 100 randomly selected mental health journal articles published between 2005–2015 that describe the translation of mental health related material into either Spanish or Chinese. Fifty articles were selected for each language. Inclusion criteria and randomization procedure are described in subsequent sections.

In order to answer the second and third research questions—that is, to compare Brislin’s back-translation model with a skopostheorie-based methodology in the context of coherence and fidelity, we conducted a comparative study in which a single mental health handout was independently translated using both a back-translation model as well as a new skopostheorie-based model of translation. In other words, the purpose of this study was to compare the resulting target texts from each of the two translation methods in terms of how consistent they are with the APA’s multicultural guidelines. Two methods were employed to elicit comparisons between the target texts of each language with respect to the two major components of translation quality described above—namely coherence and fidelity. These two methods are described in the following sections.

Systematic Literature Review of Mental Health Translation

Language selection. Spanish and Chinese were selected for this systematic review due to the popularity of translations into these languages in the mental health literature in comparison to other languages. These languages represent two of the most widely native spoken languages globally, and are the two non-English languages most spoken by people residing in the United
States (Burton, 2017; Ryan, 2013). The majority of the translation work referenced in current mental health literature is done with either Spanish or Chinese as the target language.

Article selection. An initial pool of articles was determined by searching the terms “Spanish” or “Chinese” with the term “translation” in the following major psychological research databases: PsycINFO, PsycARTICLES, PsycTESTS, or Psychology and Behavioral Sciences Collection; this search resulted in 1,288 article references and 1,130 article references for the Spanish and Chinese languages respectively. Articles were be selected for inclusion in the final pool of potential articles if they met the following additional criteria: (a) the article was published in a mental health related journal; (b) it was published between 2005–2015; (c) the target text is in either Spanish or Chinese, (d) the article and source text were both originally written in English; and (e) the article detailed a particular instance of translational activity that had not been previously described in another journal article or other publication. A total of 123 articles from the initial pool were determined to meet the complete set of criteria for Spanish language translations, which 78 articles from the initial pool were determined to meet the complete set of criteria for Chinese language translations. Fifty articles were selected for each language (Spanish and Chinese) from the list of articles fitting the above criteria by assigning each qualifying article a number and using a random number generator [www.random.org].

Because this literature review only examines 100 articles detailing translational activity, it is meant to provide a snapshot of current mental health translation work rather than a comprehensive survey of every relevant publication between 2005 and 2015. Because of the time-consuming nature of coding each article for pertinent translation nature, it was determined that a random sampling of 100 articles would provide an adequate snapshot of current translation methodologies. Thus, the results of this literature review should be interpreted with the
understanding that they are meant to provide a general picture of translation in the mental health field rather than a detailed comprehensive review.

**Coding.** Articles were coded for basic information. This information included year and journal of publication, type of source text (e.g. handout, scale, survey), intended audience of the target text, number of translators involved in each step of the translation process, qualifications attributed to translators, and translation methodology.

**Comparison of Translation Methods**

**Source Text.** The source text that was translated is a tip sheet entitled *Helping Parents Cope with Disaster* that was released by the Centers for Disease Control and Prevention (CDC) for the purpose of giving parents in the USA information on children’s common reactions to stressful events, as well as suggestions to support children in using age-appropriate coping strategies. This handout was selected for translation because it is typical of the types of informational handouts and pamphlets that various mental health organizations across the country distribute in order to provide helpful information about key mental health topics. We obtained permission from the CDC to translate the identified tip sheet and that the resulting translated materials would be available for the CDC to distribute freely, at no cost.

**Languages.** The source text was translated into Spanish and Chinese, consistent with the languages selected for the systematic literature review previously described. A comparative study of translation methodologies using these two languages is highly relevant to the body of mental health literature as well as applied work.

**Translators.** Eight translators (four dyads) were selected to participate in this project: two translator dyads for each language. Participating translators were native or non-native Spanish- or Chinese-speaking bilingual undergraduate and graduate students at Brigham Young
University (BYU). Potential translators were asked to demonstrate their level of translation competence by completing a translation of a brief section of the target text. Sample translations were reviewed, evaluated, and rated as unacceptable, acceptable, or high quality by bilingual native speaker Spanish and Chinese language professors at BYU who were familiar with translation theory. Two native and two non-native target language speakers were selected to translate for each language. Translators with the highest quality translation samples were selected to participate in the translation of the complete target text according to their assigned methodology. Every effort was made to ensure equivalency of translation competence across groups. Those selected applicants were then randomly assigned to conditions.

The four translators for each language were randomly sorted into two dyads comprised of one native target language speaker and one non-native target language speaker. Translators in group A dyads translated the source text using a back-translation methodology as it is described in Brislin’s work (1970, 1980). Translators in group B dyads translated the same source text using the alternative methodology (skopostheorie-based methodology). Translators had no particular prior training in translation.

Non-professional translators were purposefully selected for this study, as the survey of current literature, detailed in the results section of this paper, indicates that the vast majority of the translation of mental health materials is done by non-professional translators. Non-professional translators are likely to continue to do much of the translation of mental health materials in the foreseeable future due to financial and other practical considerations. Additionally, comparison of approaches to translation is more likely to be meaningful in a non-professional translation context, as the training and experience of professional translators is
likely to compensate for assignment to a suboptimal translation approach, thus obscuring the actual differences between the translation approaches themselves.

**Dyad supervisors.** Two undergraduate research assistants were selected to serve as supervisors during the translation process. Each research assistant was responsible for one translation methodology group, comprised of one translation dyad for each target language. Research assistants were trained only in the methodology that they were not overseeing, and they were only be given information and resources related to their assigned methodology. Research assistants were responsible for ensuring that translators were following their assigned methodology as explained in their respective training meetings. Research assistants were not bilingual in the languages being translated, and were not intended to provide linguistic assistance in the translation process. Rather, they were charged only with maintaining the integrity of the assigned translation methodology. They met with their supervisee translators at least once per translation stage, and were responsible for addressing translator questions and concerns as well as tracking amount of time spent in each stage of translation.

**Interview interpreters.** Four undergraduate or graduate students were selected to provide interpretation services during the interviews of target audience members. Each of the interpreters had stated experience providing interpretation services across a variety of settings, including mental health, religious, and diplomatic settings. Two interpreters were selected for each language, and each dyad of interpreters worked together during the interviews in order to increase the confidence and accuracy of the work. Interpreters were given an orientation to the project consisting of contextual psycho-educational information related to the content of the translated texts.
Translation training and conditions. Both translation groups were given an orientation and training consistent with their assigned translation methodologies. The training covered contextual psycho-educational information related to the content of *Helping Parents Cope with Disaster* to help orient translators to the subject matter being discussed in the handout. The training also provided instruction in each group’s assigned translation methodology. Translators in each group were not be given any information about the methodology being used by the other group in order to avoid knowledge of the other methodology confounding the translation outcomes.

Translators assigned to the back-translation methodology were warned about the potential sources of false equivalent translation indicated by Brislin (1970), including: discussing a shared set of rules for translating and back-translating key non-equivalent words and phrases; the impulse to “fill in the blanks” or make sense out of a poorly translated target text such that a back-translation relatively equivalent to the source text; and retaining grammatical forms of the source text which are incongruent with the target language. Translators assigned to the skopostheorie based methodology, which requires active collaboration between translators, were cautioned about the potential for group process effects, such as dominance and social loafing (one dyad member allowing the other member to do the bulk of the work), to help encourage translators to contribute to the project fully and equally.

Compensation and time frame. Translators, supervisors, and interpreters were compensated with funds from a university grant received for translation work in the Counseling Psychology and Special Education Department at Brigham Young University. Translators and interpreters each received $100 in cash for their participation. Supervisors were paid on an
hourly basis at a rate of $8.50 per hour. Translators were given the deadline of five weeks from receiving the source text.

**Translator supervision.** Translators were responsible for tracking and reporting how much time they spend on each stage of the translation process. They reported their hours to their supervisor, who reported final numbers to the primary investigator. Each translation dyad met with a research assistant throughout the translation process to report their progress and have any questions or concerns addressed.

**Group A translation methodology.** As illustrated in Table 1, group A dyads followed Brislin’s back-translation methodology. As described by Brislin, the steps of back-translation are as follows: One translator from each language group performs a forward translation on the source text. After the forward translation is complete, the second translator in the dyad back translates the initial translated text. The native target language speaker in each group A dyad was tasked with forward translation, and the non-native target language speakers were tasked with back-translation. The research assistant assigned to group A compared the source and back translations of the text and indicate any discrepancies between the two texts. The forward translator attempted to correct those discrepancies, and produced a final draft of the translation, which was again back-translated by the back-translator and the two texts again compared by the research assistant. Throughout the translation process, the translators met with their assigned research assistant regularly, at least once per translation phase, to discuss the progress of the translation and discuss any questions or issues that have arisen. These were addressed in the context of equivalence, which is the fundamental assumption underlying back-translation.

**Group B translation methodology.** As illustrated in Table 1, group B dyads followed the new proposed methodology based upon the tenets of skopostheorie: Each language group used
two translators. Each translator initially produced a translation independently based upon the translation brief. After translating independently, the translators met together to discuss their translations and how the decisions that they made in the translation process were guided by the skopos. Through their discussions, the translators collaborated to produce a second draft of the target text. Throughout the translation process, the translators met with their assigned research assistant regularly, at least once per translation phase, to discuss the progress of the translation and discuss any questions or issues that have arisen. These were addressed in the context of the aim and target audience of the target text, consistent with skopostheorie principles.

Table 1

*Comparison of Translation Methods*

<table>
<thead>
<tr>
<th>Step</th>
<th>Translation Method A</th>
<th>Translation Method B</th>
</tr>
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<tbody>
<tr>
<td>Step 1</td>
<td>Native target language speaker produces a forward translation of the source text into the target language.</td>
<td>Native target language speaker and non-native target language speaker produce independent translations of the source text into the target language according to the provided translation brief.</td>
</tr>
<tr>
<td>Step 2</td>
<td>Non-native target language speaker produces a back-translation of the target text from step 1 into the source language (English).</td>
<td>Translators meet to compare and discuss their translational decisions in light of the translation brief. They collaborate to produce a second target text.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Translation supervisor compares the English language source text to the English language back-translated text and indicates discrepancies.</td>
<td>Translation supervisor meets with translators as needed to ensure that translational decisions are both collaborative and grounded in the translation brief.</td>
</tr>
<tr>
<td>Step 4</td>
<td>Native target language speaker produces re-translations into the target language of portions of the source text that were indicated by the supervisor as problematic in the back-translated text.</td>
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<tr>
<td>Step 5</td>
<td>Steps 2-4 are repeated as needed until the translation supervisor indicates adequate equivalence between the source text and the most recent back-translated text.</td>
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</table>
Comparison of translation quality: Fidelity. Both back-translation and skopostheorie are concerned with how well the target text matches the source text. This is reflected in back-translation’s emphasis on equivalence as the primary indicator of translational success, as well as skopostheorie’s fidelity rule, which states that there must be coherence between the information in source text, the translator’s interpretation of the source text, and the information the receivers get from the target text (Munday, 2008).

Review committee member selection. In order to answer the second research question and evaluate the fidelity of the target texts produced in this study, three bilingual university instructors of each language comprised review committees to review each target text and comment on the fidelity of the target texts and making suggestions for revisions to improve fidelity. At least one committee member in each group was a native target language speaker. Committee members were university level instructors in Spanish and Chinese, selected from Brigham Young University’s Department of Eastern and Near Eastern Languages and Department of Spanish and Portuguese, as well as Brigham Young University-Idaho’s Department of Languages and International Studies. Prospective committee members were given basic information about the translation project, including any needed contextual information about disaster and crisis mental health. However, prospective committee members were not given specific information about the two translation methodologies used to produce the target texts in order to avoid potential bias toward one target text or another based solely upon the committee members’ allegiance to either translation method. Final selection of committee members was based on practical considerations of faculty interest and availability.

Fidelity review process. Reviewers on each committee were given both versions of the target text in their language of expertise as well as a copy of the English language source text.
Reviewers were asked to read both versions of the target text and comment on the linguistic equivalence of each section of the handout to the matching source text sections. Reviewers were also asked to indicate which of the two target texts seemed to have higher overall linguistic equivalence to the source text. Reviewers were each given a written template (Appendix A) to fill in during their review and asked to provide the primary investigator with this written summary of their equivalency ratings as well as any comments that they wanted to make. Reviewers were compensated with $10 in cash for their assistance.

**Comparison of translation quality: Coherence.** A second component of translation quality is coherence of the target text with the receiver’s context. The coherence rule is given the highest priority in skopostheorie, including priority over fidelity or equivalence. In the case of a back-translation approach, however, coherence is secondary to the concept of fidelity. In order to answer the third research question and evaluate the coherence of the translated texts, 12 individuals from each of the monolingual target audience groups of the target texts were selected to review and evaluate the completed target texts.

Each participant was given a black and white, plaintext version of the target text produced by each methodology. Participants were directed to read and respond to each section of each of the target texts to check for comprehension of the material, attitudes toward the translation, and how usable or helpful the participant perceives the handout to be in their own life context. Participants also had the target texts read aloud to them by the interpreters if needed. Participants were asked to indicate which of the handout target texts they thought was better overall, and why they chose that particular target text.

Monolingual or limited English proficiency (LEP) target audience members were purposefully selected for the review process despite the added layer of difficulty that comes with
a language barrier existing between participants and the primary investigator. This is because monolingual individuals and bilingual individuals have been shown to differ in a number of important ways that are relevant to this study. First, bilingual individuals have often received more education than their monolingual counterparts (Sireci, 2005). Second, bilingual individuals are often better at making sense of poor or problematic translations because of their familiarity with the source language structure. Thus, false cognates or retention of source language syntax in the translated target text may not pose as much of a problem for a bilingual speaker as they would for a monolingual speaker (Hambleton, 2005).

For the purposes of our study, we chose to define monolingual or LEP ability as being less than fluent in English, as this definition represents the broad range of individuals who would benefit most from resources in their native language. In other words, the target audience of our translation work are those individuals in the US who primarily speak a language other than English, and are not fluent in English. Potential participants in the study were asked to self-identify their level of fluency, and those who stated they felt they were bilingual were excluded from the study.

Because participants in this stage were monolingual or LEP target language speakers, the primary investigator needed to rely on interpreters to convey the thoughts of the participants. Each participant interview was conducted through the use of two fluent native speaker bilingual interpreters who were otherwise unaffiliated with the project and had no prior knowledge or training in either of the translation methodologies associated with this study. By using two interpreters, rather than a single interpreter, we intended to help reduce distortion of the participant’s feedback. However, it is important to note that even in the most careful of interpretation situations it is impossible to entirely avoid slight changes in wording, nuance, or
even meaning that result from the interpretation process. Thus, it is important that conclusions drawn from this process are made with the provision that they are based upon the interpretation of the interview process rather than a first-hand account.

**Monolingual participant selection.** Potential participants were located primarily using a snowball sampling method and were assessed for level of acculturation using Savage and Mezuk’s acculturation measure (2014). This acculturation measure is a set of basic questions asking participants to indicate the language that they use with friends, family, and the language in which they think. Questions on this measure were asked by the interviewer interpreters in the participants’ native language. Potential participants were also asked to report their English language familiarity using the same scale that is used in in the U.S. Census Bureau’s American Community Survey. Participant demographic data are reported with the results. Target audience participants were compensated for their time with $10 in cash.

**Target audience feedback analysis.** Each meeting with target audience participants was thoroughly documented by the interpreters to facilitate coding and analysis; interpreters were instructed to capture in English the content and general attitudes of participants towards the documents they were reviewing. Interview interpreters were coded using an inductive category formation content analysis approach as described by Mayring (2014) and demonstrated by Leban et al. (2015). Content analysis is a qualitative research method commonly used in social science research, and is seen as a flexible technique that is appropriate for analyzing many types of text data in order to answer a variety of research questions (Hsieh & Shannon, 2005).

In an inductive category formation approach, the category definitions and an appropriate level of abstraction are defined prior to beginning analysis. Interviews are read and excerpts
fitting the pre-established level of abstraction are subsequently assigned codes fitting within the scope of the category definitions.

Initially, the primary investigator and two research assistants independently read and coded the interview notes for three category definitions related to coherence as previously described (i.e., comprehension of material, attitudes toward the translation, and the perceived usability or helpfulness of the translation in the reader’s life context). The two research assistants were given a brief overview of the project to help orient them to the coding task; however, they were not informed as to the specifics of the two translation approaches in order to help preserve objectivity in coding.

We attempted to establish inter-coder reliability by coding the first three interviews independently and coming together to discuss our coding, and resolve any differences in our coding to determine a consistent coding method that we used to proceed with coding. Differences were resolved through discussion and comparison to previous coding decisions. The primary investigator did not have ultimate say in the resolution of coding conflicts; each coder’s voice was weighted equally in the discussion, and issues were not considered resolved until a consensus between all three coders was reached. We then recoded the same three interviews and an additional three interviews. We then met to renegotiate our coding strategy as indicated by differences in our individual coding choices. We continued with this cycle of independent coding and discussion until we felt confident in our coding consistency and agreed on the major themes relating to the three aspects of coherence. These themes were then refined into a final set of axial codes that were used to produce a final coding of the interviews on which everyone agreed.

We coded the feedback for each target language independently—that is to say, we conducted the above-mentioned process in two independent analyses—one for each target
language interview group. After coding was completed, the primary investigator wrote up the results summarizing the coding for each set of interview notes; these results sections are found in the next chapter. Both of the non-primary investigator coders reviewed the results sections for each of the language analyses and indicated that they felt it was an accurate representation of the content of the interview notes and the coding decisions that had been agreed upon in our discussions.
CHAPTER 4: Results

Results for the survey of current literature and comparison of translation methods are described in the following sections. Comparison of translation methods for the Spanish and Chinese translations of the disaster handout are attended to separately in order to provide a clear view of the results of translation for each unique language.

Systematic Literature Review of Mental Health Translation

A random sampling of 100 recent mental health journal articles introducing a new translation of a document into either Spanish or Chinese were selected and reviewed for information pertaining to translation methodology. Information about translators and translation review processes was also collected.

Languages included. Languages included in the systematic review include Spanish and Chinese. Originally, it was intended that only articles discussing target texts intended for Mandarin-speaking audiences would be selected for the pool of Chinese articles. However, it quickly became clear that a surprising shortcoming of the literature discussing Chinese translational activity did not specify whether they were translating for Mandarin or Cantonese-speaking audiences, and it was impossible to ensure that all Mandarin targeted texts were included in the pool while all Cantonese targeted texts were excluded. Thus, both languages were retained under the umbrella of Chinese, despite being separate spoken languages. Additionally, we did not differentiate between target texts in simplified and traditional Chinese. Similarly, Spanish language translations were not separated by region in this review due to lack of specific language information in the publications.

Translator qualifications. Similar to mental health language interpretation (spoken language), the individuals conducting translation of mental health written materials are generally
untrained in translation—out of the 100 surveyed journal articles describing mental health-related translation work, only eight articles described a professional or otherwise experienced translator as being involved in some part of the translation process (see Table 2).

Additionally, 47 of the articles either did not describe any particular qualifications for the translator, or simply described the translator(s) as being bilingual. Fifty-three of the articles described the translator(s) as having some sort of relevant expertise, including being a psychologist or psychology graduate student; or having expertise in a specific area of competence, such as language, content, cultural, research, public health, or test construction expertise. However, it is important to point out that having some sort of relevant expertise in the aforementioned areas does not equate with having expertise or experience in translation. For example, bilingual proficiency is a necessary, but not sufficient qualification to provide translation services; likewise, having content, test construction, or other relevant expertise does not enable someone without the relevant linguistic skills to produce translated materials. Comparatively, it is interesting to note that the Spanish translation articles contained more information about the translators’ areas of expertise than did the Chinese translation articles.

Number of translators used. Beyond knowing that the vast majority of current mental health translation activity uses back-translation as a methodology, it is difficult to ascertain many other specifics due to lack of complete reporting in journal articles. Forty-six of the 100 surveyed articles did not state how many translators worked on the translation, or simply stated that translations were done by a group of translators (see Table 3). An additional 14 of the articles using a back-translation methodology gave a total number translators involved, but did not specify how many translators worked on either the forward translation or back translation, nor did they specify whether any of the translators were involved in both the forward and back
translations—an important piece of information since being involved with both halves of the translation process can lead to translators producing seemingly equivalent back-translations from memory rather than basing them entirely on the translated text.

Table 2

<table>
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<tbody>
<tr>
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<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Bilingual only</td>
<td>26</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Professional translator</td>
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</tr>
<tr>
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<tr>
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<tr>
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</tr>
<tr>
<td>Test construction</td>
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<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Language instructor</td>
<td>1</td>
<td>1</td>
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</tr>
<tr>
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*Note. 50 journal articles involved Spanish translation and 50 articles involved Chinese translation. Numbers do not sum to 100 as some articles reported multiple qualifications for each of their translators.

Table 3

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<td>1</td>
<td>1</td>
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<td>1</td>
</tr>
<tr>
<td>Chinese</td>
<td>25</td>
<td>2</td>
<td>1</td>
<td>12</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
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</tbody>
</table>
Of the articles reporting specific numbers of forward and back translators, the majority of articles \( n=18 \) reported using a single forward translator. Ten of the articles reporting using two forward translators; four of the articles reported using three forward translators; and three of the articles reported using four forward translators (see Table 4). Likewise, the majority of articles \( n=22 \) reported using a single back translator; nine articles reported using two back translators; and three articles reported using three back translators (see Table 5). The most common pairing of forward and back translators was the dyad of one forward translator and one back translator \( n=14 \) articles.

Table 4

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</tr>
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</table>

Table 5

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</tr>
<tr>
<td>Chinese</td>
<td>31</td>
<td>9</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

Translation methodologies in use. A total of 84 of the 100 surveyed journal articles reported using a back-translation approach. Seven journal articles reported using a single forward
translation methodology, and the remaining nine articles did not report their translation methodology.

**Post-translation review.** Little information was given about any review or pilot testing process that took place after the translation process was complete. Twenty-two articles stated that they conducted some sort of pilot testing after the translation process, including cognitive debriefing interviews, focus groups, or otherwise soliciting feedback from native speakers in the target audience. Nineteen articles stated that the translation was reviewed or approved by some type of expert or bilingual committee; generally a content expert, native speaker(s), or the author(s) of the source text. It is impossible to say whether the articles that provided no information about the review process chose not to include a review step, or they did include a review process and simply did not include the details of that in the article.

**Comparison of Translation Methods: CDC Parent Handout Spanish Language**

In the following sections the translation of the CDC parent handout (into Spanish and Chinese)—using Brislin’s back-translation methodology or skopostheorie-based methodology—are described. Additionally, the two translation methods are compared. The following sections detail the expert reviewers’ and target audience participants’ feedback for the Spanish translation of the CDC parent handout.

**Review committee results.** Equivalence ratings were given in the form of a Likert scale from 1–5, with 1 representing inaccurate translation and 5 representing professional level equivalence. A full list of definitions for each anchor point on the scale can be found in Appendix B. Members of the Spanish language review committee produced similar equivalence ratings for the majority of target text sections. All committee ratings were within one point of
one another, except where indicated with an asterisk. Mean equivalency ratings for each of the
Spanish texts can be found in Tables 6 and 7.

Table 6
Mean Equivalency Ratings for Spanish Text A (Back-Translation Methodology)

<table>
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<tr>
<th>Sec. 1</th>
<th>Sec. 2</th>
<th>Sec. 3</th>
<th>Sec. 4</th>
<th>Sec. 5</th>
<th>Sec. 6</th>
<th>Sec. 7</th>
<th>Sec. 8</th>
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</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3.33</td>
<td>3.33</td>
<td>3</td>
<td>3.33</td>
<td>3</td>
<td>2.33*</td>
<td>3.33</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Note. Numbers are based on a scale of 1 to 5, with 1 representing inaccurate translation and 5 representing professional level equivalence. All committee ratings were within one point of one another, except where indicated with an asterisk.

Spanish committee members only disagreed significantly on section 7 of text A, with members assigning this section ratings of “1,” “3,” and “3.” The reviewer who provided section the rating of “1” indicated that there was a confusing formatting issue in this section where the heading delineating the section for reviewers had been placed in the wrong location in comparison to the section heading on the source text. This was an issue of post-translation formatting rather than a concern having to do with the translation itself.

Overall, reviewers commented on many errors in text A. One reviewer commented that text A was, “clearly an amateur translation.” Another reviewer noted that the text “did not feel ‘native’ or ‘fluent.’” Two reviewers indicated that the text included some inappropriate literal translations (e.g., translating “numbness” in the original text as physical numbness when the source text implied emotional numbness). Another reviewer stated, “the main problem with this target text is that it contains multiple agreement errors and switches between plural and singular third-person when addressing parents.”
Table 7
Mean Equivalency Ratings for Spanish Text B (Skopostheorie Methodology)

<table>
<thead>
<tr>
<th>Sec. 1</th>
<th>Sec. 2</th>
<th>Sec. 3</th>
<th>Sec. 4</th>
<th>Sec. 5</th>
<th>Sec. 6</th>
<th>Sec. 7</th>
<th>Sec. 8</th>
<th>Sec. 9</th>
<th>Sec. 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.67*</td>
<td>4.33</td>
<td>4.33</td>
<td>4.33*</td>
<td>4.33*</td>
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<td>4.67</td>
<td>4.33</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Note. Numbers are based on a scale of 1 to 5, with 1 representing inaccurate translation and 5 representing professional level equivalence. All committee ratings were within one point of one another, except where indicated with an asterisk.

Spanish review committee members disagreed significantly on the equivalency ratings for sections 1, 4, and 5. Section 1 received ratings of “3,” “3,” and “5.” Section 4 received ratings of “3,” “3,” and “5.” Section 5 received ratings of “3,” “5,” and “5.” One committee member rated each of these sections a “5,” writing that text B read as, “so much more fluid [than text A], reflecting more the nature of Spanish and a fluent adaptation of the message in the target language.” His high ratings appear to reflect this strong preference for the style of text B, while the other reviewers commented that while the text B appeared to be more of a professional translation than text A, there remained grammatical and vocabulary issues in some sections.

All three reviewers were unanimous in their indication that text B appeared to have higher linguistic equivalence to the source text. One reviewer commented that text B, “while clearly not professional, approaches a professional level in some of the sections.” Reviewers also commented on the general overall higher quality and fluency of text B in comparison to text A. One reviewer expressed concern over the reading level of both translations. He wrote:

Both [texts] suffer from a similar problem: They are written at a level that is probably too difficult for their target audience. Latino immigrants do not typically have high levels of education. As a consequence, their reading skills simply are not well developed. That is why smart advertising companies generally try to use a fifth-grade (or so) vocabulary. A better approach for this pamphlet translation would be to specifically identify the target audience and craft a text that works for that audience.
Although information on the target audience was explicitly provided to translators for text B, and these translators were encouraged to use this description of the target audience as a guide to answer questions about the translation process, a reading level requirement was never specifically raised with team B translators, and they were left to determine this for themselves.

Overall, the average equivalency ratings for text B were consistently higher than they were for text A, by an average of 1.134 points. An independent-samples t-test was conducted to compare the mean equivalency ratings for the sections in translation A with the equivalency ratings for the sections in translation B. There was a significant difference in the scores for translation A ($M=3.07, SD=.31$) and translation B ($M=4.2, SD=.28$); $t(18)=8.65, p=3.99E-8$. In other words, the mean equivalency rating for text A was 3.07 with a standard deviation of .31. The mean equivalency rating for text B was 4.2 with a standard deviation of .28. It was hypothesized that text B would have ratings that were statistically significantly higher than text A, with statistical significance being set at a threshold of $\alpha<=.05$. The independent-samples t-test yielded a test statistic $t(18)$ of 8.65. This corresponded with a $p$ value of $.001$, confirming the hypothesis previously established and indicating that the mean equivalency rating for text B is statistically significantly higher than the mean equivalency rating for text A.

**Target audience demographics.** Every effort was made to ensure that participants represented the variety of ages and socioeconomic and cultural backgrounds found in the target audience, though it was impossible to find individuals representing every possible combination of demographics to comprise a sample of 12. Thus, we chose to emphasize heterogeneity in country of origin because of regional language usage and cultural differences that could clearly impact the relevance and usability of translations.
Of the 12 Spanish target audience participants, all were self-identified limited English proficiency (LEP) individuals. Three reported that they felt they spoke English, “very well,” despite not being fluent. Seven participants reported that they felt they spoke English, “well,” and two reported that they felt they spoke English, “not very well.” It should be noted that none of the participants who self-identified as speaking English as “very well” or “well” were fluent enough in English to attend college courses taught in English, and all had enrolled in English as a second language (ESL) courses in order to build English skills. Additionally, relative proficiency in conversational English does not equate with fluency in other uses of English. For example, individuals may be able to converse in English, but might not be able to read and fully comprehend introductory mental health educational materials because such materials require both a broader command of the language as well as more content specific vocabulary.

As stated in the methods section, we primarily sought to find target audience participants who came from a wide variety of countries of origin in order to attend to the linguistic diversity that exists within the Spanish language. All 12 participants reported that they are not citizens of the United States, and reported that they had been in the United States for an average of 7.9 months, with time spent in the United States ranging from three months (n=5 participants) to two years (n=1 participant). Participants reported that they were from seven different countries: Peru (n=4 participants), Mexico (n=2 participants), Ecuador (n=2 participants), Bolivia (n=1 participant), Honduras (n=1 participant), Uruguay (n=1 participant), and Venezuela (n=1 participant).

Nine of the participants were female and three were male. The average age of participants was 24.64 years old, with the youngest participant being 18 years old and the oldest participant
being 31 years old. It should be noted that one participant declined to state her age, and thus her age is not included in the above average.

As part of the interview process, participants were asked the following questions about their English usage in daily life. Participants were asked what language they speak with friends. It should be noted that as all of our participants were living in the USA and trying to learn English, many were likely striving to speak English as much as possible with local friends, either out of necessity or the desire to practice the language. Thus, responses to this question should not be confused with level of English fluency. Four participants reported that they speak English “almost all of the time,” with their friends. One participant reported that they speak Spanish “almost all of the time” with their friends. The remaining seven participants reported that they speak English and Spanish “equally” with their friends.

Participants were also asked what language they speak with family. Six participants reported that they speak Spanish “all of the time,” with family. One participant reported that they speak English “all of the time,” with family. Two participants reported that they speak Spanish “almost all of the time” with family. One participant reported that they speak English “almost all of the time” with family. Two participants reported that they speak English and Spanish “equally” with family.

Finally, participants were asked in what language they typically think. Two participants reported that they think in Spanish “all of the time.” One participant reported that they think in Spanish “almost all of the time.” One participant reported that they think in English “almost all the time.” The remaining eight participants reported that they think in English and Spanish “equally.”
Theme category 1: Comprehension of material. The category of material comprehension encompasses two major themes. These themes included (a) participants’ general background and understanding of the topic of disaster response and (b) participants’ comprehension of the two versions of the handout.

Understanding of disasters. One of the subthemes of comprehension that we discovered was the way that participants defined disasters. Spanish language participants defined disasters in a variety of ways. Most participants included natural disasters (floods, earthquakes, fires, tornadoes, hurricanes, tsunamis) in their definitions of disaster. Many participants also mentioned family tragedies or difficulties (harm to a family member, divorce, abuse in the family, bullying, abortion). Some participants also talked about personal difficulties as disasters (having personal failures, emotional instability). Additionally, several participants mentioned crime, terrorism, or accidents that result in bodily harm.

Participants also talked about groups and entities they expected to be able to seek help from in a disaster scenario. Most frequently, participants mentioned that they would seek help and shelter from their home country government or a religious organization. One participant also mentioned looking to the media for helpful information in a disaster. Participants also referred to non-governmental organizations (NGOs) and foreign governments as sources of help in the event of a disaster.

Several participants talked about their understanding of human behavior in the event of a disaster and how it related to the content of the handout that they were reviewing. Several participants referenced the unpredictability of human behavior in disaster situations and noted that they thought the handout’s descriptions of shock and confusion were accurate.
Comprehension of translations. Overall, participants indicated that they were able to understand both documents, though both contained errors to varying degrees. Participants universally indicated that text B was easier to understand overall, though a few participants indicated that they felt specific sections of text A were clearer than the matching sections of text B. Interestingly, these specific sections varied greatly from participant to participant, and there were no sections where all or even many participants thought that text A was easier to comprehend than text B. In two cases, participants indicated that they only understood what was meant in a specific section of text A because they could read that same section in text B to help them make sense of what was written in text A.

Participants indicated that grammatical errors were often the cause of confusion or lack of clarity, and referred to misused reflexive verbs, poor word choice, incomplete phrases, language that was either too informal or too formal, and syntax errors. All participants indicated far more grammar related issues with comprehension in text A. However, two participants indicated that they thought the title of text A was clearer than the title of text B, despite remarking that the title of text A was not entirely grammatically correct. Clearly, a lack of grammatical or other technical errors, though important in producing comprehensible text, is not sufficient for easy comprehension. Many participants also referenced differences in levels of specificity in discussing ease of comprehension, with several participants stating that their reason for preferring one text to the other was a matter of direct and specific vs. indirect and vague language, with participants overwhelmingly indicating that text B was more direct and specific overall, making the concepts easier to understand. Interestingly, responses about comprehension did not appear to vary significantly across participants of different countries of origin.
Theme category 2: Attitudes toward the translations. Category two encompassed any responses from the interviewee indicating a positive or negative attitude toward either or both of the translated texts. It was also used to capture neutral observations about perceived similarities or differences between the texts, or comments about the quality of the translation that participants did not directly relate to issues of comprehension.

Overall attitudes towards the texts. All of the participants clearly demonstrated a stronger positive attitude towards text B than towards text A. As a whole, participants indicated that text B appeared to have fewer errors and was perceived as being better written. One participant said they read text A as presenting disasters as a far off or future concern, while they read text B as treating disasters as a present concern, and reported that this made text B better overall. Interpreters noted participants would frequently make comments such as, “I like B,” or “B is better,” when comparing each of the individual sections between both texts. Some participants made comments indicating that text B appeared to be more of a finished product than text A. One participant went so far as to indicate that they would be embarrassed to publicly present text A as a finished text, and that they would not recommend that we use it at all. Another participant indicated that she believed that text A had been produced by someone who had either forgotten much of the Spanish language or was clearly not a native speaker of Spanish (though in reality, native speakers produced all forward translations of the target texts in this study).

Occasionally, participants indicated that they liked a specific section of text A better than text B. In each but one of these cases, it was better word choice that seemed to give text A the upper hand. In these instances, participants made comments indicating reactions including that a particular section of text A used words more consistent with the that participant’s everyday
language, that the tone seemed more loving and less rigid than it did in the section in text B, and that particular wording seemed more accurate. One participant indicated that they preferred the section in text A because it was briefer comparative to that in text B. As with category one responses, there were no specific sections of the text where text A was preferred by all or even most of the participants. Not surprisingly, comments indicating preference or positive or negative attitude towards each of the texts were very often accompanied by comments about the comprehensibility or clarity of the texts.

Participants also commented quite frequently on the tone of the texts. Text A was perceived to have an informal tone, while text B was seen as more formal in tone. Greater formality in tone was largely seen as desirable by participants, though a few participants made comments indicating that some sections were too formal, even somewhat impersonal. However, the vast majority of participants saw a more formal tone as an advantage rather than a disadvantage.

Aside from these few instances, formal tone was indicated as being easier to read, aiding comprehension, and making the text seem more professional. One participant who strongly preferred text B indicated that text A’s level of informality made it seem like something casual his uncle would send him, while text B’s level of formality made it seem like a professional educational document. Another participant agreed, remarking that text A seemed more conversational or like writing a letter to a friend, while text B read as a pamphlet meant to distribute information from an official source. A third participant similarly stated that text B was much better because it sounded like it was from a book on self-help or guidance. This participant also explained that she is familiar with educational pamphlets and other similar materials, and that text A did not seem as professional as other materials that she has seen.
**Perception of text quality.** Participants were typically quick to indicate grammatical errors, problems with syntax, or potentially problematic word choice in both documents. While participants commented more frequently on errors they perceived in text A, text B was not without error. Participants noted grammatical errors in text A far more often than they noted them in text B; as a group, participants indicated grammatical or syntax errors in all ten of the sections of text A while only referencing similar errors in two sections of text B.

When it came to problems related to word choice, in some instances participants indicated that specific words were not used by people from their country of origin, though at other times participants indicated that some words in both texts seemed strange or inaccurate without referencing whether or not the language was familiar to their culture. Several participants indicated that the translator’s decision to leave the word “shock” in English in text A was not culturally consistent for them and suggested finding a different word to use. A few participants stated that text A included some words which, while technically correct, may be difficult for someone who was less educated to understand.

Additionally, most participants remarked on words or phrases—particularly in text A—that were unusual, misused, or seemed to connote meanings that were probably inconsistent with the intention of the original text. Almost all of the participants commented on the mistranslation of “crying” to a conjugated verb form rather than the noun for crying, which they felt would be more correct. A few participants also reacted to word choice in both texts when discussing physical affection; these participants noted that some of the words used were not words they would typically use to talk about physical affection between children and parents, but rather connoted romantic affection between partners. This is particularly noteworthy given the importance of using appropriate words when discussing physical affection with children.
Theme category 3: Perceived usability. The third category of analysis sought to capture participants’ senses of how helpful or usable each of the texts would be to them or their families. This category included opinions of which, if either, of the texts they would prefer to use, as well as comments about how it compared or contrasted with the participants’ lived experience or culture.

Consistency with prior knowledge and experience. One participant, from Uruguay, reported that the material in the texts was not familiar to her experience. She reported that natural disasters do not happen very often in Uruguay, and so her awareness and the awareness of others from her country of issues related to disasters was minimal. She seemed to feel that the handout was more applicable to individuals in other countries where natural disasters were more of a danger. Despite these comments, this participant stated that she believed that the material in the handouts was relevant to her and that she would use it in a disaster situation. Another participant similarly reported that the document had relevance because it supplied important information that this participant was lacking about disasters and how to help children in the event of a disaster.

In contrast, a participant from Peru indicated that she had experienced many natural disasters in Peru and that she found text B in particular to be more explanatory and consistent with her lived experience. Another participant from Peru gave a differing view, stating that she had not experienced many significant natural disasters in Peru, but that she appreciated the guidance available to parents in text B.

Participants from Bolivia, Ecuador, Mexico, Venezuela, and Honduras indicated that they liked the handouts. They also felt that the handouts provided very accurate descriptions of people’s reactions to disaster scenarios.
**Translation preference and usability.** Each of the 12 participants reported that they would prefer to use text B if they needed to find information on helping children after a disaster. Participants tied this preference largely to their perception that the concepts in text B were easier to understand, as well as the comparative lack of grammatical and other technical errors in text B. As one participant stated, in a disaster scenario it would be better to use a document that is clear. A few participants reported that text B was even useful in helping them to make sense of unclear parts of text A. One participant said that both texts would be usable, despite preferring text B. This participant commented that the handout seemed useful to her, and that reading it would help her feel more confident in managing a disaster situation.

Other participants agreed that the handout was a good family resource providing general information about disaster response. In some cases, participants would tie their preference for specific sections of the text to better relatability or ease of use for parents, in each case stating that the section in text B was more relatable or seemed to give better guidance. Many participants talked about text B as being superior because they saw it as explaining concepts in a clear way that would aid them in explaining those same concepts to children, making it more usable for their families than text A. In contrast, despite preferring document B for better grammar and a more formal, official tone, one participant stated that she felt that children may have an easier time reading text A because it seemed more personal and direct. However, though she felt that children might be better able to relate to the informal tone of text A, she stated that she would prefer to use document B.

**Comparison of Translation Methods: CDC Parent Handout Chinese Language**

The following sections detail the feedback for the Chinese translation of the CDC parent handout. Both expert reviewer and target audience participant feedback are reviewed.
**Review committee results.** As with the Spanish review committee, members of the Chinese review committee provided equivalence ratings given in the form of a Likert scale from 1–5, with 1 representing *inaccurate translation* and 5 representing *professional level equivalence*. A full list of definitions for each anchor point on the scale can be found in appendix B. Unlike the Spanish reviewers, Chinese reviewers had much more disparity in their ratings of equivalence, with nine out of 10 sections in text A and eight out of 10 sections in text B receiving ratings that were more than one point different from one another. These sections are noted with an asterisk (see Table 7). Surprisingly, one committee member—a native speaker—provided ratings of 5 across all 10 sections of both texts, and commented,

> The linguistic equivalence level of both texts looks very similar to me. They both use written words and sentence structures. Word-to-word translations are accurate and professional. Translated sentences sound very natural to a native speaker. To me, the only difference between them is just the fact that one text uses simplified Chinese and the other uses traditional Chinese.

Notably, in most cases, it was this reviewer’s rating of 5 that was two or more points away from the ratings of the other two reviewers. Mean equivalency ratings for each of the Chinese texts are included in Tables 8 and 9.

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*Note.* Numbers are based on a scale of 1 to 5, with 1 representing *inaccurate translation* and 5 representing *professional level equivalence*. All committee ratings were within one point of one another, except where indicated with an asterisk.
Reviewers disagreed on their ratings for all sections in text A with the exception of section 10. The reviewer who provided ratings of ‘5’ across the board did not provide specific comments for text A. The other reviewers commented on how parts of text A had been translated directly in a way that made the target text awkward or Anglicized. One reviewer, a native Chinese speaker, commented, “[Text A] sounds less formal. Some sentences are translated in a way that sounds more like English sentences,” while the other reviewer, a non-native Chinese speaker, commented, “[text A is of] overall poor quality. The majority has a direct translation into Chinese, which made it stiff, awkward, and basically unintelligible.”

Table 9

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Note. Numbers are based on a scale of 1 to 5, with 1 representing inaccurate translation and 5 representing professional level equivalence. All committee ratings were within one point of one another, except where indicated with an asterisk.

Again, reviewers disagreed on their ratings for the majority of the sections. Two sections, 2 and 4, were the only sections where reviewers’ ratings were within one point of one another. The reviewer who provided ratings of ‘5’ across the board again did not provide specific comments for text B. The other reviewers remarked that while this text seemed stronger in some ways, there were still problematic aspects of the translation. One reviewer, a native Chinese speaker, commented, “The register [of the text] is different. It sounds more formal and the translation is more adapted to the usage of native speakers.” The non-native Chinese speaker reviewer disagreed and was much more critical of the text, stating,

While this translation is better, there are still many issues with direct translation. More importantly, there is clearly no consideration for what Chinese parents might understand
when reading this. [There are] several mistranslations throughout.

Overall, the reviewers were somewhat mixed in their response when asked which text appeared to have higher linguistic equivalence to the source text. The reviewer who gave all sections ratings of ‘5’ declined to choose one text over the other. The second native Chinese speaker reviewer stated,

Text A appears to [have] higher linguistic equivalence, but some translation is understandable, but sounds foreign. Text B sounds more natural to me except for some misunderstanding of [the original] English sentence.

The non-native Chinese speaker reviewer selected text B as being superior in linguistic equivalence, but noted, “It is basically choosing between horrible (A) and not good (B).”

It is interesting to note that despite this mixed feedback, the average equivalency ratings were higher for text B than they were for text A for all but two sections, one of which had an equal rating, and the other of which had a higher rating for text A. For the eight sections where text B was rated higher in equivalency on average than text A, it was rated higher by an average of .54 points. For the section where text A was rated higher in equivalency than text B, the difference was .33 points. For all but one section, the difference in average ratings between the two texts was less than one point, with the last section having a difference of only one point. Thus, the differences between the texts in terms of their equivalency ratings seemed to be miniscule and only weakly in favor of text B. An independent-samples \( t \)-test was conducted to compare the mean equivalency ratings for the sections in translation A with the equivalency ratings for the sections in translation B. There was a significant difference in the scores for translation A (\( M=3.37, SD=.37 \)) and translation B (\( M=3.77, SD=.32 \)); \( t(18)=2.61, p=.0089 \). In other words, the mean equivalency rating for text A was 3.37 with a standard deviation of .37.
The mean equivalency rating for text B was 3.77 with a standard deviation of .32. It was hypothesized that text B would have ratings that were statistically significantly higher than text A, with statistical significance being set at a threshold of $\alpha \leq .05$. The independent-samples $t$-test yielded a test statistic $t(18)$ of 2.61. This corresponded with a $p$ value of .0089, confirming the hypothesis previously established and indicating that the mean equivalency rating for text B is statistically significantly higher than the mean equivalency rating for text A.

**Target language speaker demographics.** Of the 12 Chinese target audience participants, all were native Mandarin Chinese speakers. Of the participants, all were self-identified LEP individuals, and none reported that they spoke English “very well.” Two reported that they felt they spoke English, “well,” despite not being fluent. Seven participants reported that they felt they spoke English, “not well,” and three reported that they felt they spoke English, “not at all.” It should be noted that none of the participants who self-identified as speaking English as “well” were fluent enough in English to attend English language college courses, and had enrolled in an English as a second language course in order to build English skills.

Ten of the 12 participants reported that they are not citizens of the United States. Nine of the participants reported that they had been in the United States between three and seven months (average of 5.11 months). The remaining three participants had been in the United States for three, four, and 26 years respectively. Notably, all three of the participants who have been in the United States for multiple years reported that they spoke English either “not well” or “not at all.” Six participants were originally from Taiwan, and six were originally from China and represented six distinct regions of China (Jiang Su, Beijing, Si Chuan, Zhe Jiang, Guangzhou, and Fuzhou).
Ten of the participants were female and two were male. The average age of participants was 31 years old, with the youngest participant being 20 years old and the oldest participant being 70 years old.

As part of the interview process participants were asked the following questions about their English usage in daily life. Four participants reported that they speak Mandarin “all of the time,” with their friends. The remaining eight participants reported that they speak Mandarin “almost all of the time” with their friends.

Participants were also asked what language they speak with family. Eleven participants reported that they speak Mandarin “all of the time,” with family. The remaining one participant reported that they speak Mandarin “almost all of the time,” with family.

Finally, participants were asked in what language they typically think. Five participants reported that they think in Mandarin “all of the time.” Six participants reported that they think in Mandarin “almost all of the time.” One participant reported that they think in English and Mandarin “equally.”

**Theme category 1: Comprehension of material.** The category of material comprehension encompasses two major themes—participants’ general background and understanding of the topic of disaster response, and participants’ comprehension of the two versions of the handout.

**Understanding of disasters.** Participants defined disasters in a variety of ways. Almost all of the participants talked about natural disasters, and mentioned them either in general terms or by listing specific types of natural disasters including tsunamis and earthquakes. The second most common type of disaster was mentioned by more than half of the participants, and was coded as “personal difficulties.” This code included participants’ references to events or life
difficulties that might cause negative emotions or are destructive to one’s mental health. Also
common were responses about family difficulties or tragedies, including children not being
morally educated, divorce or other separation of family, or death of or harm befalling a family
member. A couple of participants referenced financial loss, general bodily harm, or interpersonal
violence as being types of disaster.

Participants also mentioned several sources of help that they would seek in the event of a
disaster, as well as the type of help that they hoped could be provided to them by these sources.
Almost all of the participants mentioned that they would seek help primarily from family and
close friends or social groups. Five participants mentioned the government as a source of help in
the event of a disaster, and five participants referenced their religious organization, individuals
within that organization, or God as being a source of help in the event of a disaster. Two
participants mentioned seeking help from mental health professionals, and the internet, local
volunteers, insurance companies, and “official organizations,” were all mentioned by one
participant each as being potential sources of disaster help. In terms of types of aid, almost all of
the participants mentioned seeking shelter or other physical necessities in the event of a disaster.

Interestingly, most participants referenced how much mental and emotional support they
believed children or other relatives would need in the event of a disaster; however, such support
was not something that many participants described as being something that they would seek for
themselves or their families in the event of a disaster. Five of the participants talked about
seeking emotional support, and four participants mentioned seeking financial support. One
participant disclosed that they would seek spiritual advice.

**Comprehension of translations.** Overall, participants indicated that they were able to
understand both documents. Notably, despite having equal numbers of participants from Taiwan
and mainland China (regions which mainly use traditional and simplified Chinese respectively), participants did not seem to simply default to identifying the writing system more commonly used in their region of origin as producing a more comprehensible text.

One participant, an individual from mainland China, stated that overall, both documents were easy to read and understand and stated that both traditional and simplified Chinese were easy to understand. Three participants, all from mainland China, expressed that they felt that text A was clearer overall, with two participants citing the usage of simplified Chinese as the reason text A was more clear, and a third participant expressing a preference for the perceived less formal tone of text A.

The remaining eight participants (six of whom were from Taiwan and two of whom were from mainland China) indicated that they felt text B was easier to read and understand, citing better grammar, clearer format, clearer, more natural and everyday language, and a preference for traditional Chinese over simplified Chinese. In other words, though all six individuals from Taiwan preferred the traditional Chinese of text B, participants from mainland China were divided in their preference.

Despite being able to understand both documents overall, participants identified segments of both documents that were confusing or unclear. In reviewing text A, many participants noted that unfamiliar phrases or poor grammar led to comprehension problems. Though most participants commented on overall problems with comprehension in text A, two sections in particular—a section on common fears children may have in the event of a disaster, and a section on helping children ages birth to five cope with a disaster experience—were most frequently identified as being in some way difficult to understand in text A. Several participants declined to give comprehension-related feedback on specific sections of text A in favor of more broad
statements of clarity issues for the text as a whole. These participants chose to give more specific feedback on individual sections of text B, which they indicated was overall much easier to comprehend.

With regard to text B, nearly all of the participants expressed confusion over the Chinese rendering of the phrase, “realistic picture,” from the original text sentence, “When talking to your child, be sure to present a realistic picture that is both honest and manageable.” Participants tended to read this translation literally, as evidenced by several participants asking where they could obtain such a picture in order to show it to children.

Many participants identified segments of the section about helping children cope regardless of age as being unclear in text B. Participants referred to grammatical problems and unclear usage or meanings of particular words, such as the translation of “label,” as leading to confusion. Participants identified similar problems with clarity in several other sections of text B as well, though no other section was mentioned as being at least in part unclear by more than three or four participants, and the segments mentioned as unclear varied from participant to participant.

Participants also provided feedback on the differences in comprehension when the texts were read aloud to them versus being asked to read the text to themselves. Overall, participants did not seem to find much difference in comprehension when the texts were read to them aloud versus when they read the texts to themselves. A few participants preferred to listen to rather than to read the texts, with one participant noting that her age (70) made it more difficult for her to read the characters and thus she preferred to listen to the texts read aloud. Many participants stated that they preferred reading to themselves because it allowed them to take the material at their own pace and take the time needed to consider and process the material.
**Theme category 2: Attitudes toward the translations.** Category two encompassed any responses from the interviewee indicating a positive or negative attitude toward either or both of the translated texts. It was also used to capture neutral observations about perceived similarities or differences between the texts, or comments about the quality of the translation that participants did not directly relate to issues of comprehension.

**Overall attitudes towards the texts.** Unsurprisingly, participants invariably preferred the text that they felt was clearer and easier to comprehend. Participants who thought text A was clearer thought that A was a better text overall, while participants who thought text B was clearer thought that B was a better text overall. Participants most frequently cited the clarity of their text of choice as the reason for their preference, though several participants cited better grammar, word choice, or format specifically as reasons for their preference. The participant from mainland China who had stated that she thought both texts were clear expressed a preference for text B, stating that it had better grammar and was more to the point in providing advice. Thus, nine participants preferred text B, and three participants preferred text A.

Participants commented frequently about the tone of the texts. Some participants commented that text B had a more professional tone, which they preferred, while a few participants commented that they preferred the less formal tone of text A, as they found the professional tone of text B to create too much distance between the text and the audience. Indeed, in general participants commented positively on the texts when they perceived the tone to be intimate and familiar to their daily way of speaking. However, participants were divided on whether text A or text B did a better job of this. In remarking on tone, one participant commented that a phrase in text B that meant “being killed,” came across too harshly, and suggested that a softened phrase such as “passed away,” be substituted.
Perception of text quality. Participants also provided specific and general feedback on grammar, syntax, and word choice for each of the two texts. Participants tended to provide more general comments in these areas than specific comments about particular errors. In terms of grammar and syntax, participants tended to view text B as having fewer and more minor errors than text A overall. Participants noted that better grammar led to a more fluent text in text B. Participants gave specific feedback about problematic grammar in two particular sections of text B, while commenting on problematic grammar across four different particular sections of text A. Comments on syntax were less frequent, though participants pointed out a few syntax errors in each text that made the text more confusing.

Participants commented on specific word choice more frequently than they commented on specific grammar problems. In general, participants commented more frequently on word choice in text B, both in terms of positive comparisons to text A as well as in pointing out specific words that seemed problematic. Comments about both word choice in both texts had similar themes. Several of the comments made about word choice noted that the words chosen in particular sections were quite repetitive or had virtually identical connotation despite being more distinct in the original source text. Also common were comments about word choice that seemed unspecific or obscured the intended meaning of the text.

Theme category 3: Perceived usability. The third category of analysis sought to capture participants’ senses of how helpful or usable each of the texts would be to them or their families. It included opinions of which, if either, of the texts they would prefer to use, as well as comments about how it compared or contrasted with the participants’ lived experience or culture.

Consistency with prior knowledge and experience. Participants as a whole had very few disagreements with the material in the texts, and identified many aspects of the texts that
matched their conceptualization of how to help children in the event of a disaster. In particular, participants appeared to emphasize teaching children to be aware of risks and existing dangers and helping them to feel secure. Participants echoed the importance of providing children with careful supervision and attending to their mental and emotional needs. Many participants commented that the material contained in the handout seemed consistent with their understanding of human emotional and behavioral responses to disaster.

One participant in particular (from mainland China) told interviewers that the content of the handouts matched what she had witnessed when she had experienced a natural disaster. In particular, she noted that the material in the section on children age birth to five matched what she had done with her daughter who had been in that age range. Likewise, another participant (from Taiwan) commented that much of the content matched what she already knew, particularly the content in sections on helping children regardless of age and children ages 6–12.

**Translation preference and usability.** Participants commented on aspects of the handout material that they found particularly useful or thought provoking. One participant remarked how the material in the handouts helped her to understand children’s reactions in disasters and how children’s behavior reflects their mental states. Another participant commented that though the handout’s recommendation for providing plenty of physical comfort to children was not something to which parents from her culture were prone, she thought that it was an important recommendation.

Several other participants expressed similar opinions of finding the handout to be very informative and helpful. Many highlighted specific sections that contained advice or instructions that seemed particularly helpful, including the sections that provide specific advice regarding various age ranges. In fact, it was these age-specific sections that participants seemed to consider
most useful. Many participants remarked that text B seemed more usable because it seemed to
give professional advice in a clear and explicit way. One participant stated that although text A
was comprehensible, it required the reader to read and consider the entire document to distill the
intended meaning. Another participant pointed out that the clarity and comparative lack of
grammatical errors in text B was important, since she could only apply the handout’s advice with
her children if she was able to clearly understand it. The three participants who preferred text A
stated that it was simply easier for them to read by virtue of the usage of simplified Chinese and
the perceived less formal tone.

However, not all of the advice offered by the handout was readily accepted. A couple of
participants reacted to the suggestion, “[children ages birth to five] should spend ample time with
loving, reassuring adults.” One participant remarked that it was not a good idea to let children
spend time alone with an adult because the adult in question may be unreliable or dangerous.
Another participant stated that it would be important to teach children know how to interact with
adults. Clearly, some participants interpreted this advice to refer to adults other than the parents
or primary caregivers of their children, though this is not implied by the original text.
Survey of Current Literature

In surveying a sampling of 100 current journal articles in the mental health literature that involve language translation as part of the described research, it is clear that there is a lack of standardization of translation methodology in the field. Likewise, researchers varied widely in the amount of information about the translators and translational process used in their research. The most frequently reported setup, if a methodology was clearly reported at all, was a back-translation methodology utilizing a single forward translator and single back translator is the primary approach to language translation currently in use. However, it is important to keep in mind that though back-translation was explicitly stated as the translation methodology in the majority of articles, the literature was less forthcoming on the number of translators involved in the translation process.

For those who did report this number, the most common set up was a single forward translator and a single back-translator. Because this is the model originally posed by Brislin, it is reasonable to assume that many of those researchers not reporting the number of translators followed this same pattern. In other words, the authors of somewhere between 14 and 50 articles utilized a 1:1 back-translation approach. Those researchers who do not report using a back-translation approach either report using a forward translation only approach with no specified theoretical grounding, or fail to report any details at all about their approach to translation.

Translators by and large appear to have little or no significant previous translation experience or training—less than 10% of the translators involved in the sample of articles were described as being a professional or otherwise experienced translator. The results of this survey indicate that not only is standardization of translation methodology lacking in the mental health
field, but the expectation that researchers will fully report their translation methodology and translator qualifications is nonexistent. It is crucial that reporting these aspects of translational activity becomes a standard expectation for all published research, as the circumstances and methodology of translation directly affect the quality of the translated text.

Comparison of Translation Methodologies

For both Chinese and Spanish, the equivalency ratings from bilingual language professors as well as the feedback from target audience participants strongly supported the target texts produced with the skopostheorie-based translation methodology (methodology B) as being superior translations in terms of equivalence and usability. Here we review the major themes in the feedback for each language and consider this feedback in the light of the American Psychological Association’s multicultural guidelines (APA, 2002b).

Comparison of target audience participant groups. Spanish and Chinese represent two incredibly different languages that are representative of what can be significantly different cultures. Even within the groups of native speakers for each of these languages, there exist wide variations in culture depending on regional and individual contextual factors. Because of this variation, it is impossible to adequately capture the full range of multicultural variation in a group of 12 individuals; this should be kept in mind as we discuss the feedback from these participants, as 12 individuals who share the same native language cannot be expected to speak for the experiences and possible reactions of an entire population. Despite many in-group differences in our sample populations, participants were also homogenous in other ways—for instance, many of our participants were college-aged; additionally, many of them did not have children. Nevertheless, clear themes arose throughout the feedback process for each language that provide a basis for provisional conclusions about the translation of mental health materials
into Spanish and Chinese. Due to the resources, time, and funds available for this study, we were limited to interviewing 12 individuals for each language. Future research involving larger numbers of participants or participants who reflected additional diversity will be integral in supporting or challenging the results of this study and will allow appropriate standards of translation to be solidified more fully in the mental health field.

Spanish and Chinese target audience participants defined disasters in similar ways. Almost all of the participants in both groups included natural disasters in their definitions, though the specific types of natural disasters mentioned appeared to vary based on region of origin. Themes of personal and family difficulties were also common between both groups.

The two participant groups differed slightly in their comments about help seeking in a disaster scenario. Spanish language participants most frequently talked about seeking help and shelter from government sources, while Chinese language participants most frequently talked about seeking help primarily from friends and family before referencing government help. Several participants in both groups referenced seeking help from religious organizations. This may be due to religious affiliation of participants; although religious preferences were not asked as part of interview process, many of the participants were attending ESL courses at a religiously-affiliated university—Brigham Young University. Though the university does not require affiliation with The Church of Jesus Christ of Latter-day Saints (LDS Church) for ESL students, many students who attend these courses are members of the LDS Church.

Feedback from both groups was largely positive in terms of the consistency of the content of the handout with participants’ preexisting knowledge and understanding of disasters and human behavior. Participants from both groups who shared that they had previous experience
living through a natural disaster confirmed that they had witnessed reactions to the disaster that matched the content of the handout.

Overall, Spanish participants seemed more willing to provide evaluative feedback more openly—that is to say, Spanish participants readily offered feedback that included some statement of judgment. Conversely, Chinese participants seemed much more hesitant to express strong evaluative feedback, and offered more objective feedback. For example, while the question, “how are these two texts different?” frequently elicited a statement such as “text B is more clear,” or “text B is better organized,” from Spanish participants, Chinese participants tended to simply identify differences between the texts without adding a statement of judgment—e.g., “One is simplified Chinese and one is traditional Chinese;” or “They have different formats.” However, when asked, participants in both groups expressed clear preferences for one text or another.

**Spanish language feedback.** The feedback obtained from both the expert reviewers as well as the target audience participants indicated a unanimous and strong preference for the text produced using the skopostheorie-based methodology in terms of both linguistic equivalence and relevance and usability. Grammar, word choice, syntax, fluency, and tone were all seen as contributing to the skopostheorie-based text’s superiority over the back-translation text. Indeed, one of the themes that arose frequently in the interview process was the perceived difference in tone between the two documents. In particular, Spanish participants frequently remarked on the formality of the skopostheorie-based text in comparison to the informality of the back-translation text. While it may in some cases be tempting to assume that a more informal, personal document might be seen as more approachable or usable, it appears that a document that is perceived as being too informal loses an important sense of legitimacy and ethos.
Overall, target audience participants appeared to find the skopostheorie-based text to be much more usable, and indicated that they believed this version of the handout was clear and contained useful information that would be helpful in the event of a disaster. In particular, participants appeared to carefully consider what characteristics of a handout might be important if they were to need to find information to help their families in the wake of a disaster, and indicated that the skopostheorie-based text was much more practical for this need.

**Chinese language feedback.** The feedback obtained from the expert reviewers and target audience participants was more supportive of the text produced using the skopostheorie-based methodology, though the support was slightly more mixed than it was for the Spanish language text. While some of the mixed feedback can be easily attributed to a preference for the simplified Chinese of the back-translation text, this is likely not the only factor that resulted in more mixed feedback than the feedback for the Spanish texts.

One potential explanation for the differences may in part be attributable to the relative difficulty of translating a text from English to Chinese—two very different languages from different linguistic families. Translating from English to Spanish, on the other hand, is a much easier process—both languages are members of the Indo-European linguistic family and share significant similarities in grammar, syntax, and even cognates. Thus, retaining English source text grammar and syntax structure and other errors of translation may be far more obvious and jarring in a translation into Chinese than they would be in a translation into Spanish. Indeed, two of the three expert Chinese reviewers commented on problematic direct translations particularly in the back-translation text, though both texts had some problematic direct translation. Despite the mixed feedback from the expert reviewers, however, the average equivalency ratings for the
skopostheorie-based translation were higher than those for the back-translation text to a statistically significant degree.

Additionally, with the exception of those participants who appeared to default to the back-translation text as being more relevant and usable due to being written in simplified Chinese, participants as a whole suggested that the skopostheorie-based translation was more usable due to the same reasons offered by the Spanish language target audience participants—a more professional tone and a clearer presentation of helpful advice for helping children in the event of a disaster.

**Consistency with multicultural guidelines.** It is important to evaluate the results of this study in light of the multicultural practice guidelines set forth by the American Psychological Association (2002b). The fifth guideline emphasizes the use of culturally appropriate skills in applied practice. Specifically, psychologists are to “incorporate understanding of clients’ ethnic, linguistic, racial, and cultural background” (APA, 2002b, p. 1) in their approach to research and practice. Thus accurate and culturally sensitive translation is an ethical obligation if we are to continue to operate in a multicultural world.

The first guideline stresses awareness of the differences in cultural attitudes and beliefs that may exist between psychologists and those who are culturally different from them. Thus, one standard of comparison may be how well each translation methodology encourages cognizance of these differences and how these differences may influence communication between individuals from differing cultural backgrounds. That is to say, does the translation methodology recognize that factors other than language may play a role in how the receiver of a target text interprets the text, regardless of the sender’s or translator’s intention?
Clearly, skopostheorie-based translation would appear to encourage a more culturally aware and situationally based approach to translation. In fact, a core assumption of skopostheorie is that the sender’s intention and the receiver’s comprehension are unlikely to be identical—a discrepancy that is resolved through deference to the purpose of the translation activity. In mental health translation, this purpose is almost certainly always going to relate to the practical usability of the target text by the target audience in addressing personal, family, or community matters of mental health.

Conversely, back-translation prioritizes linguistic equivalence while assuming that a linguistically equivalent text will necessarily be a usable text. Aside from what is mentioned in the literature on decentralizing texts in order to obtain greater linguistic equivalence, discussions about the cultural relevance of target texts is lacking in discussions of best practices of back-translation.

The second and forth multicultural guidelines set forth by the American Psychological Association emphasize multicultural knowledge and sensitivity in order to increase effective cross-cultural communication and produce ethical research. These guidelines suggest that involving members of target populations in the formulation, execution, and evaluation of research and applied mental health activities will greatly increase the quality and effectiveness of these professional activities. The texts produced in this study using both the back-translation and skopostheorie methodologies involved equal numbers of native speaker translators and were both reviewed by members of the target audience. However, the feedback of target audience members revealed that overall, the texts produced by the skopostheorie methodology offered greater target cultural sensitivity and more effectively communicated the intended message.
Recommendations for Future Translation

In light of the results of this study, the following recommendations are offered for those commissioning or producing translated handouts or other mental health educational materials.

1. **Select translators mindfully.** The sampling of 100 journal articles conducted as part of this study indicate that the vast majority of individuals who do translation work in the mental health field are not professionally-trained translators. Bilingualism, while necessary, is not sufficient for someone to produce a high quality translation. Thus, translators should be selected mindfully—even when, perhaps particularly when—the translators have no professional translating training or background. The most conveniently available bilingual individual—a colleague, friend, or significant other—may not be the best choice. Having translation samples evaluated by someone with language expertise can be helpful in determining whom to select. Individuals willing to work with partners and/or have their work reviewed and critiqued by others are ideal. Familiarity with the content area of the translation is extremely helpful, and should be provided to the extent possible to translators previously unfamiliar with the content area. If the budget is available to employ a professional translator, it is advisable to do so, since professional translators are, by virtue of their experience and employment, familiar with many of the issues discussed in this study and may be able to save significant time by avoiding many of the common errors produced by nonprofessional translators.

2. **Provide a brief.** Translation briefs are a critical foundation for skopostheorie-based translation (Nord, 1997). The brief should be provided to the prospective translators prior to beginning translation work, and should be referenced throughout the translation to ensure it is the primary influence in resolving dilemmas throughout the translation.
process. The brief should clearly state the intended function of the text, as well as key information about the target audience. This information should include any details necessary to help the translators understand aspects of the cultural background and context of the intended audience that may influence decision-making throughout translation. The brief should explicitly discuss the intended reading level of the translation, as nonprofessional translators may automatically translate the text at their own reading level rather than realizing this is a notable consideration for translating for a particular target audience. It should also contain the intended time and place where the target text will be received, the medium of transmission of the text, and the motive for the production and/or the reception of the target text. Thorough translation briefs are critically important for translators regardless of their level of translation experience—if a professional translator is involved in the translation work, it is imperative that a thorough translation brief be provided at the outset.

3. **Back-translation is unnecessary.** The linguistic equivalence ratings of our target texts suggest that back-translation as a model of translation does not appear to ensure equivalence to any greater degree than a skopos-theorie-focused translation model. In fact, a back-translation process that appears to be successful in indicating equivalence when the source text and back-translation are compared with one another may actually provide a false sense of security about the quality of the translation. Instead, putting resources into a review by language experts familiar with the target audience is more likely to result in a better sense of level of translation equivalence.

4. **Translate in pairs.** Both models of translation explored in this study require two translators, but in the back-translation model translation happens individually while in the
skopostheorie-based model, translators collaborate to produce a final translated text. Thus, neither model of translation requires greater resources in terms of number of translators. The benefits of translating using a dyad of a native and non-native speaker of the target language include a greater likelihood of avoiding common grammatical and other technical errors that often result from nonprofessional translators translating alone. It also helps translators to negotiate the gap that sometimes appears between the general intention of the original source text and the culture and needs of the target audience.

5. **Pilot test.** The most ideal way to gain a sense of how closely a translated text matches the original brief is to pilot test the translated texts with individuals who are members of that target audience and who are not fluent in English. Sample members of the target audience are immensely helpful in evaluating the usability of a text as well as identifying problematic aspects of the translation that may not be readily obvious even through a review of the text by bilingual experts.

**Limitations and Directions for Future Research**

One of the potential confounding factors in this study was the decision of translators to produce one of the Chinese texts in simplified Chinese while producing the other text in traditional Chinese. Though the majority of the pool of Chinese language target audience members still expressed a preference for one of the texts, the feedback may have been clearer had translators been instructed to use either simplified or traditional Chinese rather than being left to decide this on their own. The focus of the research could then become more narrow as the target audience and thus the target audience participants would become limited to the regions of China that use that particular writing system.
Though characteristic of and appropriate given this type of qualitative research, the participant sample sizes involved in the study are small enough that there may be important sections of the target populations that were not represented and did not have the opportunity to provide feedback on the usability and relevance of the target texts. Another limitation associated with the participant sample is relative homogeneity across some attributes for many of the participants, including age range and parental status. Additional research could be conducted with different or larger participant pools using the same target texts with the purpose of either validating or disputing the conclusions of this study. Further, though two very different languages were selected for the purposes of this study, the conclusions of this study are based on feedback given for translations into these two languages only, and thus we must be cautious in applying the lessons learned here to other languages.

Another issue to consider is that though participants expressed that they found the skopostheorie-based text to be relevant and usable, they may have been overstating the degree to which they found the text relevant and usable out of respect or deference to the researchers. Unfortunately, it is difficult to ensure that this is not the case.

Despite potential limitations of the study, it is reasonable to conclude based on the results of this study that a skopostheorie-based approach to mental health translation is a promising direction to pursue as we strive as a field to be more culturally competent. Additional future directions for research include testing a skopostheorie-based methodology against traditional back-translation by translating additional texts and translating into additional languages. It would be particularly important to explore the application of a skopostheorie-based translation methodology to the translation of assessment instruments, since such instruments are one of the most frequent types of texts to be translated in the mental health field.
References


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APPENDIX A: Review Committee Comment Template

1. What is the level of linguistic equivalence between the target text and the source text?
Linguistic equivalence is defined as word-to-word or phrase-to-phrase translation accuracy between the source and target texts.

   a. Target Text A:
   Rate the linguistic equivalence of the target and source texts sections using the following scale:
   1-Inaccurate translation; 2-Moderate inequivalence; 3-Minor inequivalence; 4-Clear equivalence;
   5-Professional level equivalence

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<thead>
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<th>Sec. 1</th>
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   Comments:

   b. Target Text B:
   Rate the linguistic equivalence of the target and source texts sections using the following scale:
   1-Inaccurate translation; 2-Moderate inequivalence; 3-Minor inequivalence; 4-Clear equivalence;
   5-Professional level equivalence

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   Comments:

2. Which target text appears to have higher linguistic equivalence to the source text?

   Comments:
APPENDIX B: Target Audience Member Interview Guide

(1) Cultural and family background questions
   a. Tell me about your family.
   b. The topic of the handout/tip sheet you will be reading is how to help children after a disaster, such as a family tragedy or natural disaster. What types of events would you consider to be disasters?

(2) Questions for comparing individual sections of the target text:
   a. Tell me about what this section says. (Use individual comprehension questions below if necessary to elicit a description of understanding).
      Comprehension questions related to individual sections (to be used if necessary):
      i. Section 2: What is the purpose of this tip sheet?
      ii. Section 3: Do all children react to disasters in the same predictable way?
      iii. Section 4: What emotions might a child experience after a disaster?
      iv. Section 5: How might a child behave differently after a disaster?
      v. Section 6: What might a child worry about after a disaster?
      vi. Section 7: What could you do to help a child according to this section?
      vii. Section 8: How could you help a young child feel safe after a disaster?
      viii. Section 9: How could you help a child between the ages of 6 and 12 feel safe after a disaster?
      ix. Section 10: How could you help an older child feel safe after a disaster?
   b. How does this section compare to how you would choose to respond if your family was to witness or experience a disaster?
   c. Which parts of this section seem confusing or incorrect? Why?
   d. How easy is it to understand the information in this section when it is read aloud to you?
   e. How easy is it to understand the information in this section when you read it yourself?

(3) Questions for comparing the two texts:
   a. How are these two texts different from each other?
   b. Which of these two texts is better? Why?
   c. Which of these texts is easier to read and understand? Why?
   d. If you needed to find information on helping your children after a disaster, which of these two texts would you prefer to use? Why?

(4) Follow-up questions (optional):
   a. Where would you go for help if your family experienced a disaster?
   b. Who would help your family in the event of a disaster? What kind of help would this person provide?
   c. This handout lists suggestions for helping children after a disaster. What ways do you help children or other relatives cope with stress in your family?
Helping Parents Cope with Disaster

1. Anyone who is a parent knows how hard it can be to raise a child. Add a stressful situation, like a natural disaster or other emergencies, and a difficult job gets even harder. When disasters happen, it is important to remember the health and well-being of yourself and your children. If you are prepared for potential disasters, you can be more confident in your ability to keep your family safe, and your children are likely to handle the disaster better as well.

2. It is difficult to predict how children will react when disasters occur. Some children may not seem to be upset while others may have an emotional reaction or a change in behavior. Changes in emotions and behaviors can occur immediately or after a short delay.

3. Potential Reactions to Disasters:

   **Common Emotions:**
   - Shock and surprise
   - Anxiety and tension
   - Confusion
   - Fear or worry
   - Grief
   - Anger
   - Guilt and shame
   - Helplessness
   - Isolation
   - Despair and sadness
   - Numbness
   - Fear of being alone

   **Behavioral Changes:**
   - Crying
   - Eating patterns
   - Sleeping patterns
   - Anger or short temper
   - Fatigue
   - Hyperactivity
   - Restlessness
   - Difficulty concentrating

When talking to your child, be sure to present a realistic picture that is both honest and manageable. Be aware that after a disaster, children may fear that:

- They will be separated from family, and they will be left alone.
- The event will happen again.
- Someone will be injured or killed.

www.cdc.gov
Helping Parents Cope with Disaster

How Can I Help My Children Cope?

Regardless of your child’s age, remember to:

- Model coping through calm reactions, even though you may be stressed. If you feel unable to control your emotions, seek out help and support from family or professionals.
- Keep routines as consistent as possible.
- Answer questions openly and honestly and at a level they can understand.
- Allow your children to talk about the event from their point-of-view. Let them know you will listen to their concerns and questions. Help them label and cope with their feelings. Let them know it is okay if they feel angry or sad.
- Reassure your children that you love and will care for them.
- Provide a peaceful household (and school experience).

Ages birth to 5:

- Children should have limited exposure to media and adult conversations about crisis and disaster.
- They should spend ample time with loving, reassuring adults.
- Parents should provide plenty of physical contact (for example, hugs and cuddles).
- Offer reassurance, especially at bedtime.
- Provide opportunities to be physically active.

Ages 6 to 12:

- Spend ample time with loving, reassuring adults.
- Provide verbal and physical reassurance that you are with them and will care for them.
- Limit repeated exposure to adult discussions and the news media. Watch with them and talk with them about what they are seeing and hearing, how they feel about it, and what it means for them and the family.
- Provide opportunities to talk and play, be creative and physically active.
- Provide reassurance, especially at bedtime.

Ages 13 to 18:

- Let them know your whereabouts and make sure you know where they will be.
- Provide time to talk and interact with peers.
- Allow opportunities to contribute in the family or assist others in responding to the crisis or community needs if they are interested.
- Give encouragement and support in taking care of themselves: eating well, sleeping sufficiently, exercising regularly.
- If you are staying in a shelter or in other unfamiliar surroundings, talk to your teen about staying safe.
- Talk with your teen about their feelings and discuss ways to help them cope.

For more information, please contact:
Centers for Disease Control and Prevention
National Center for Injury Prevention and Control
Division of Violence Prevention

1-800-CDC-INFO • www.cdc.gov • odlinfo@cdc.gov
APPENDIX D: Spanish CDC Parent Handout Target Texts

Target Text A:

Section 1:
Consejos para los padres en cuanto a cómo enfrentar a los desastres
Lista de consejos

Section 2:
Cualquier padre sabe lo difícil que es criar a los hijos. Agregue una situación estresante, como los son los desastres naturales u otras emergencias, y una tarea difícil se vuelve aún más difícil. Cuando los desastres ocurren, es importante recordar la salud y el bienestar propio y la de sus hijos. Si se prepara para posibles desastres, pueden estar más seguros de su habilidad de mantener a su familia a salvo, y es probable que sus hijos manejarán los desastres mejor también.

Section 3:
Es difícil predecir cómo reaccionarán los hijos al ocurrir un desastre. algunos no aparentarán molestos mientras que otros pueden tener una reacción emotiva o un cambio de comportamiento. Los cambios emotivos y los de comportamiento pueden ocurrir inmediatamente o después de una corta demora.

<table>
<thead>
<tr>
<th>Posibles reacciones ante los desastres</th>
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<tr>
<td><strong>Section 4:</strong></td>
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<tr>
<td>Emociones comunes:</td>
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<tr>
<td>El shock y la sorpresa.</td>
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<td>La ansiedad y la tensión.</td>
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<td>La confusión.</td>
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<td>El miedo o la preocupación.</td>
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<td>La pesadumbre.</td>
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<td>El enojo.</td>
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<tr>
<td>La culpabilidad y la vergüenza</td>
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<td>El desamparo</td>
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<tr>
<td>El aislamiento.</td>
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<tr>
<td>La desesperación y la tristeza.</td>
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<td>El entumecimiento.</td>
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<td>El miedo de estar solo.</td>
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| **Section 5:**                        |
| Cambios de comportamiento.            |
| El lloro.                             |
| Los hábitos alimenticios.             |
| Los hábitos de sueño.                 |
| El enojo o el mal genio.              |
| La fatiga                             |
| La hiperactividad.                    |
| La intranquilidad.                    |
| La dificultad para concentrar.        |

Section 6:
Al hablar con su hijo(a), asegúrese de presentar una imagen realista que es tanto honesto como manejable. Esté consciente de que después de un desastre los hijos tal vez teman que:
- se separarán de la familia, y que se encontrarán solos.
- el acontecimiento pasará de nuevo.
- alguien se lastime o sea herido fatalmente.
Consejos para los padres en cuanto a cómo enfrentar a los desastres

Section 7:
¿Cómo puedo ayudar a mis hijos hacer frente a los desastres?

Sin importarla edad de su hijo, recuerde:
• modelar comportamiento adecuado al mostrar reacciones calmadas, aún si sientes estresado(a). Si siente incapaz de controlar sus emociones, busque ayuda y apoyo de familia y de seres profesionales.
• mantener las rutinas tan consistentes como sea posible
• responder a sus preguntas abierta y honestamente y a un nivel que puedan entender.
• Permita a sus niños hablar sobre el evento desde su punto de vista. Hágales saber que usted escuchará sus inquietudes y preguntas. Ayúdales a nombrar y a hacer frente a sus emociones. Hágales saber que está bien si se siente enojado o triste.
• asegurar a sus hijos de que les aman y que les cuidarán.
• proveer un hogar (y una experiencia escolar) de paz.

Section 9:
De edades 6 a 12:
• Pasar tiempo suficiente con adultos amorosos y reconfortantes.
• Provee consuelo verbal y físico de que estarán con ellos y que los cuidarán.
• Límite la exposición repetida de conversaciones adultos y los medios de comunicación. Véanlo con ellos y hable con ellos sobre lo que están viendo y escuchando, cómo se sienten, y qué significa para ellos y la familia.
• Provee oportunidades para hablar y jugar, sé creativo y activos físicamente.
• Provee palabras de consuelo, especialmente a la hora de dormir.

Section 10:
De edades 13 a 18:
• Déjales saber sus rumbos y asegúrense que sabrán dónde ellos estarán.
• Provee tiempo para hablar e interactuar con sus compañeros.
• Permite oportunidades para contribuir en la familia o asistir a otros en responder a la crisis o las necesidades de la comunidad si están interesados.
• Dé a sus hijos aliento y apoyo en cuanto al cuidado de sí mismos: comer bien, dormir lo suficiente, hacer ejercicio con regularidad.
• Si se está quedando en un albergue o en otro medio ambiente desconocido, habla con su adolescente sobre manteniéndose a salvo.
• Hable con sus hijos acerca de sus emociones y discutan maneras de ayudarles a hacerles frente.

Para más información, favor de contactar:
Centros para el Control y Prevención de Enfermedades
El Centro Nacional para el Control y Prevención de Lesiones

La División de Prevención de la Violencia
1-800-CDC-INFO • www.cdc.gov • cdcinfo@cdc.gov
Ayudando a los Padres de Familia a Hacerle Frente a los Desastres

Consejos para los padres

Quien es padre sabe lo difícil que puede ser criar a un niño. Agregue una situación estresante a una tarea difícil, como un desastre natural o otras emergencias, y esa tarea se vuelve aún más difícil. Cuando los desastres ocurren, es importante que usted recuerde tomar muy en cuenta su salud y bienestar y la de sus hijos. Si usted está preparado para hacer frente a posibles desastres, tendrá más confianza en su capacidad de mantener a su familia a salvo, y es más probable que sus hijos también sepan cómo actuar ante el desastre de la mejor manera.

Es difícil anticipar la reacción de los niños cuando los desastres ocurren. Algunos niños pueden no parecer afectados mientras que otros pueden presentar una reacción emocional o un cambio de comportamiento. Estos cambios en las emociones y en el comportamiento pueden ocurrir inmediatamente o después de un corto tiempo.

Al hablar con su hijo(a), asegúrese de mantener una perspectiva realista que sea honesta y razonable. Tenga en cuenta que después de un desastre los niños pueden temer que:

<table>
<thead>
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<th>Posibles reacciones ante los desastres:</th>
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<tr>
<td><strong>Las emociones más comunes son:</strong></td>
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<tr>
<td>• Susto y sorpresa</td>
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<td>• Ansiedad y tensión</td>
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<td>• Confusión</td>
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<td>• Miedo y preocupación</td>
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<td>• Impotencia</td>
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<td>• Aislamiento</td>
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<td>• Desesperación y tristeza</td>
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<tr>
<td>• Insensibilidad</td>
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<td>• Temer de estar a solas</td>
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<td><strong>Cambios de comportamiento:</strong></td>
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<td>• Llanto</td>
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<td>• Cambio de hábitos alimenticios</td>
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<td>• Cambio de hábitos de sueño</td>
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<td>• Dificultad para concentrarse</td>
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• serán separados de su familia y se quedarán solos.
• el incidente volverá a ocurrir.
• alguien saldrá herido o muerto

**Section 7:**

¿Cómo puedo ayudar a mis hijos a enfrentar un desastre?

**Cualquiera que sea la edad de su hijo, recuerde que usted debe:**

• Ser ejemplo de cómo afrontar el problema con tranquilidad. Si se siente incapaz de controlar sus emociones, busque la ayuda y el apoyo de sus familiares o de profesionales.
• Mantener una rutina de la manera más consistente a como sea posible.
• Contestar a las preguntas de sus niños con claridad y honestidad, y a un nivel que sea comprensible para ellos.
• Permitir que sus niños hablen sobre lo acontecido desde sus propios puntos de vista. Hágales saber que usted escuchará sus inquietudes y preguntas. Ayúdelos a identificar y hacer frente a sus sentimientos. Hágales saber que está bien si es que ellos se sienten enojados o tristes.
• Asegurarse de que sus hijos sepan que usted los ama y que cuidará de ellos.
• Proveer un ambiente de paz en casa (y una buena experiencia en la escuela).

**Section 8:**

**Del nacimiento a los 5 años de edad:**

• Los niños deben ser expuestos con límite a los medios de comunicación y las conversaciones entre adultos sobre crisis y desastres.
• Los niños deben pasar tiempo suficiente en compañía de adultos cariñosos y alentadores.
• Los padres deben hacer saber de su paradero a sus niños y a la vez asegúrese de saber dónde estarán estos.
• Los padres deben proporcionar tiempo a sus hijos para hablar e interactuar con sus compañeros.

• Los padres deben proveer de bastante contacto físico a sus niños (por ejemplo, abrazos y canciones).
• Los padres deben ofrecer seguridad y confianza a sus niños, especialmente a la hora de acostarlos.
• Los padres deben proporcionar oportunidades a sus niños para que estos sean físicamente activos.

**Section 9:**

**De 6 a 12 años de edad:**

• Los niños deben pasar abundante tiempo en compañía de adultos cariñosos y alentadores.
• Los padres deben proporcionar apoyo verbal y físico reorientes a sus hijos, y hacerles saber que están con ellos y cuidarán de ellos.
• Los padres deben limitar la repetida exposición de sus hijos a las conversaciones entre adultos y a los medios de información. Vea con ellos y hableles sobre lo que están viendo y oyendo, sobre cómo se sienten al respecto y lo que significa para ellos y para la familia.
• Los padres deben proporcionar oportunidades a sus niños para hablar y jugar, ser creativos y físicamente activos.
• Los padres deben ofrecer seguridad y confianza a sus niños, especialmente a la hora de acostarlos.

**Section 10:**

**De 13 a 18 años de edad:**

• Los padres deben proporcionar tiempo a sus hijos para hablar e interactuar con sus compañeros.
• Los padres deben permitir que sus hijos tengan oportunidades de contribuir en el hogar o, si les interesa, ayudar a otros a enfrentar la crisis u otras necesidades de la comunidad.
• Los padres deben alentar y apoyar a sus hijos en sus esfuerzos por cuidar de sí mismos: al comer bien, al dormir lo suficiente, y al hacer ejercicio con regularidad.
• Si se encuentran en un albergue o en algún otro entorno desconocido, los padres deben hablar con sus hijos(as) adolescentes sobre cómo permanecer seguros.
• Los padres deben hablar con sus hijos(as) sobre sus sentimientos y discutir formas de ayudarles a hacer frente a estas situaciones.

Para obtener más información, póngase en contacto con:
Centros para el Control y la Prevención de Enfermedades CDC
Centro Nacional para la Prevención y Control de Lesiones
División de Prevención de la Violencia de CDC
1-800-CDC-info • www.cdc.gov/spanish/ • cdcinfo@cdc.gov
APPENDIX E: Chinese CDC Parent Handout Target Texts

Text A:

Section 1:
帮助父母应对灾难
黏土清单

Section 2:
任何一位为人父母的人都知道抚养一个孩子是多么的困难。加上充满压力的状况，像一场自然灾害或者其他突发事件，原本就困难的工作更觉艰难。当灾难发生时，记住您和您孩子的健康和快乐是重要的。如果您为潜在的灾难作好准备，您可能对您保证家庭安全的能力更有信心，并且您的孩子可能更好的处理灾难。

Section 3:
预测孩子们在灾难降临时如何应对灾难是困难的。有些孩子可能看起来会心烦，但有些会有情绪反映或者行为变化。情绪和行为上的变化可能会马上产生或者推迟一小段时间。

Section 4:
对灾难的潜在反应
常见情绪：
- 震惊和惊讶
- 焦虑和紧张
- 疑惑
- 害怕或担心
- 悲痛
- 生气
- 内疚和惭愧
- 无助
- 孤立
- 绝望和伤心
- 麻木
- 恐惧独处

行为变化：
- 哭泣
- 饮食规律
- 睡眠规律
- 生气或易躁
- 焦虑
- 多动
- 无法休息
- 困难专注

Section 5:
当和您的孩子讲话时，确保呈现出真诚和操控自如的真实面。要意识到，一场灾难后，孩子们可能会恐惧：

- 他们会与他们的家庭分开，并且被他们的家庭所抛弃。
- 同样地，事情还会发生。
- 有人会受伤或被杀害。

Section 7:

我怎么能帮助孩子应对呢？

不管孩子多大了，记住：

- 尽管您可能压力很大，还是请尽量通过冷静和理性的模式处理。如果您感觉自己不能够控制您的情绪，请向家人和专业人士寻求支持。
- 尽可能持续保持规律。

- 在他们可以理解的范围内，公开和诚实地回答问题。
- 允许您的孩子从他们的角度谈论事情，让他们知道您愿意倾听他们的顾虑和问题，帮助他们认识并且处理自己的情绪。让他们知道感到伤心和难过没有关系。
- 再次向您的孩子保证您爱他们并且会照顾他们。
- 提供一个和谐的家庭环境（和学校经历）。

Section 8:

五岁之前：

- 孩子们应该对有关危难和灾难的媒介和成人对话有有限的曝光。
- 他们应该和爱他们的，有保障的成人花足够多的时间。
- 父母应该给予适量的肢体接触（例如，拥抱和搂抱）。
- 给予保障，尤其是在睡前。
- 提供有肢体活跃的机会。

Section 9:

从六岁到十二岁：

- 与关爱，有保证的父母花足够多的时间。
- 给予语言和肢体的保障，您会和他们在一起并且照顾他们。
-限制对成人对话和新媒介的接触。与他们一起观看和讨论他们所见所闻，对事情的感受的，
和对他们和他们家庭的的意义。
-提供交谈和玩耍的机会，尝试创新和肢体活动。
-给予保障，尤其是在睡前。

Section 10:

从十三岁到十八岁：
-让他们知道您的行踪并且确保您知道他们会去哪里。
-提供他们和同伴交谈和交流的时间。
-允许在有兴趣的情况下，有给予家庭帮助，协助他人面对灾难或者社区需求的机会。
-鼓励或者支持他们照顾自己：健康饮食，充足睡眠，经常锻炼。
-如果你们待在灾难或者其他不熟悉的环境，告诉您的孩子注意安全。
-和您的孩子讨论他们的感受并且讨论如何面对的方法。

如需更多信息，请联系：疾病控制预防中心，国家创伤预防和控制中心，暴力预防分会
Text B:

Section 1:
第1頁
幫助父母應對災難

提示表

Section 2:
1) 任何父母都知道撫養孩子有多困難。若是加上更有壓力的情況，像自然的災害或其他緊急狀況，會令這項任務難上加難。當災難發生，記住你自己和孩子的健康和福祉是最為重要的。如果你為潛在的危機做準備，便能更從容自信地保護你的家庭，你的孩子會有更好的處理災禍

Section 3:
2) 如何預測兒童在災害發生有什麼反應是很難的。有些孩子會看似沒有生氣，而其他也許會有情緒起伏或行為改變的狀況。情緒和行為的變化可能在災難的當下或間隔一段時間後發生。

Section 4:
3) 對災害的潛在反應:
   a) 常見的情緒：驚嚇和驚訝，焦慮和緊張，困惑，恐懼或擔憂，悲傷，憤怒，內疚和羞恥，無助，孤立，絕望和悲傷，麻木，害怕孤獨。

Section 5:
b) 行為改變：哭泣，飲食模式，睡眠模式，憤怒或短暫的脾氣，疲勞，多動，不安，難集中

Section 6:
4) 跟孩子傾談時，一定要呈現反映現實的圖片。請注意，災害發生後，孩子們可能會害怕:
   • 他們會與家人分離，被孤立。
   • 事件會重覆。
   • 有人會受傷或被殺。

Section 7:
第2頁
幫助父母應對災難

如何幫助我的孩子妥善處理?

無論您孩子的年齡，請記住：
• 建立冷靜反應的態度，即使你可能會有壓力。如果你覺得無法控制你的情緒，尋求家庭或專業人士的幫助和支持。
• 尋求經常正常規律的生活作息。
• 不加掩飾和誠實地回答問題，並讓他們能理解。
• 讓你的孩子從他們的觀點談論事件，讓他們知道你會聆聽他們的關注和問題，幫助他們標
籤和處理他們的感覺。讓他們知道他們有憤怒和悲傷是可以的。
• 保證你的孩子，你愛，並會照顧他們。
• 提供一個和平的家(和學校經驗)。

Section 8:

5 歲以下的孩子：
• 兒童不宜接觸過多關於報導災情的媒體資訊和成人對話。
• 孩子應該花足夠的時間跟親愛他人和讓人放心的成人相處。
• 父母應提供充足的肢體接觸(例如擁抱和依偎)。
• 提供安慰，尤其是在就寢時間。
• 提供機會多活動。

Section 9:

6-12 歲：
• 他們應該花足夠的時間跟親愛他人和讓人放心的成人相處。
• 提供言語和肢體的安慰，讓他們知道你們是在一起，並會照顧他們的。
• 有限地讓他們重複接觸成人的對話和新聞媒體。跟他們一起觀看和討論他們看到和聽到的
及自己的感受，災難將對他們和整個家庭帶來什麼影響。
• 提供交談和娛樂的機會，要有創意和多肢體上活動。
• 提供安慰，尤其在就寢時間。

Section 10:

13-18 歲：
• 讓他們知道你的行蹤，並確保你知道他們所在何處。
• 提供時間去跟同伴交談和互動。
• 如果他們有興趣，讓他們有機會為家庭作出貢獻，或幫助他人應對危機或社會需要。
• 鼓勵和支持他們照顧自己：吃得好，睡眠充足，並定期鍛鍊。
• 如果你們住在收容所或其他陌生的地方，與孩子討論如何保持安全。
• 與你的孩子談論他們的感覺和幫助應對的方法。

查詢詳情，請聯絡
APPENDIX F: IRB Approval Letter and Consent Forms

Institutional Review Board
for Human Subjects

Brigham Young University
A-285 ASB Provo, Utah 84602
(801) 422-3841 / Fax: (801) 422-0620

August 25, 2016

Amy Black

Re: Language Translation in Mental Health: A Comparison of Current Back-Translation and Skopos-theoretic-Based Methods

Dear Amy Black

This is to inform you that Brigham Young University’s IRB has approved the above research study.

The approval period is from 8-25-2016 to 8-24-2017. Your study number is X16271. Please be sure to reference this number in any correspondence with the IRB.

Continued approval is conditional upon your compliance with the following requirements.

1. A copy of the ‘Informed Consent Document’ approved as of 8-25-2016 is enclosed. No other consent form should be used. It must be signed by each subject prior to initiation of any protocol procedures. In addition, each subject must be given a copy of the signed consent form.

2. All protocol amendments and changes to approved research must be submitted to the IRB and not be implemented until approved by the IRB.

3. A few months before this date we will send out a continuing review form. There will only be two reminders. Please fill this form out in a timely manner to ensure that there is not a lapse in your approval.

If you have any questions, please do not hesitate to call me.

Sincerely,

[Signature]

Robert Ridge, PhD, Chair
Sandee Aina, MPA, Administrator
Institutional Review Board for Human Subjects
Introduction
This research study is being conducted by Amy Black, Brigham Young University (BYU) doctoral student in Counseling Psychology, and Melissa Allen Heath, BYU Associate Professor in the McKay School of Education’s CPSE department. The purpose of this study is to compare two translations of an informational handout for parents on the subject of helping children in the event of a disaster or traumatic event. You were invited to participate because you are employed as a translator on this project.

Procedures
If you choose to participate in this research study, you will take part in one interview, after the translation work is completed, where we will ask you for your thoughts and experiences working as a translator on this project. The purpose of the interview is to examine your perceived successes, difficulties, and problem-solving approaches as related to your translation work. Your participation will help us to learn more about different types of translation and how they can be used effectively in a mental healthcare setting.

If you agree to participate in this research study, the following will occur:
- You will be interviewed about your insights and experiences translating a mental health document about helping children respond to disasters and traumatic events.
- This interview will take place in person on BYU campus, or over the phone or videoconferencing if needed.
- The interview will require approximately 1 hour.
- You have the right to decline to participate at any time before, during, or after the interview. You also have the right to withdraw your interview responses and request that any recordings be destroyed if you decide that you would not like your answers to be included in our study.
- The interviewer will take notes during the interview, and the interview will be audio recorded to ensure that we record your responses accurately. At any point in time, you have the right to decline having the interview audio recorded.

Risks/Discomforts
There are minimal risks for participation in this study. It is possible you may feel some discomfort when reading or commenting on the mental health handout because it talks about disasters and traumatic events in very general terms. You may be asked to talk briefly about traumatic events or disasters that you or someone in your family has experienced, but are free to decline to answer this or any other question. If the interview experience becomes uncomfortable, you may choose to terminate your participation in the study.

Benefits
There will be no direct benefits to you. It is hoped, however, that through your participation, researchers may learn how to make translation more effective and
efficient. It is believed that this study will help researchers to better understand how to translate mental health information for parents and other individuals.

**Confidentiality**
The research data (audio recordings and written notes) will be kept in a secure location/on password protected computer and only the primary researchers (Amy Black and Melissa Heath) and undergraduate research assistants will have access to the data. At the conclusion of the study, all identifying information will be removed, including names, and the data will be kept in the primary researcher’s locked office (340-K MCKB).

**Compensation**
You will receive hourly compensation at a rate of $8.50 per hour for this interview through your employment as a translator.

**Participation**
Participation in this research study is voluntary. You have the right to withdraw at any time or refuse participation without any negative consequence.

**Questions about the Research**
If you have questions regarding this study, you may contact Melissa Allen Heath at 801-422-1235 or Melissa_Allen@byu.edu or Amy Black [Amy.Black@byu.edu] for further information.

**Questions about Your Rights as Research Participants**
If you have questions regarding your rights as a research participant, contact IRB Administrator at 801-422-1461; A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu

**Statement of Consent**
I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.

Name (printed): ___________________ Signature_________________ Date____
Introduction
This research study is being conducted by Amy Black, Brigham Young University (BYU) doctoral student in Counseling Psychology, and Melissa Allen Heath, BYU Associate Professor in the McKay School of Education’s CPSE department. The purpose of this study is to compare two translations of an informational handout for parents on the subject of helping children in the event of a disaster or traumatic event. You were invited to participate because you are a foreign language professor or instructor at BYU.

Procedures
If you choose to participate in this research study, you will be asked to review two translations of a single, two-page handout for parents on the subject of helping children after disasters or traumatic events. You will then be asked to rate the linguistic equivalence of each translation to the source text document, and will also be asked to give any comments or qualitative feedback that you may have on the quality of the translation work. Your participation will help us to learn more about different types of translation and how they can be used effectively in a mental healthcare setting.

If you agree to participate in this research study, the following will occur:
- You will be given a review form containing both quantitative rating scales and space to record qualitative comments, and asked to use this form to review two translated versions of a handout in comparison to the source text.
- This activity will require approximately 1 hour.
- You have the right to decline to participate at any time before, during, or after you finish the review process.
- Your notes and feedback in the rating form will be kept and used to help evaluate the quality of translation work produced by our translation teams.

Risks/Discomforts
There are minimal risks for participation in this study. It is possible you may feel some discomfort when reading or commenting on the mental health handout because it talks about disasters and traumatic events in very general terms. You will not be asked to talk about traumatic events or disasters that you or someone in your family has experienced. If the interview experience becomes uncomfortable, you may choose to terminate your participation in the study.

Benefits
There will be no direct benefits to you. It is hoped, however, that through your participation, researchers may learn how to make translation more effective and efficient. It is believed that this study will help researchers to better understand how to translate mental health information for parents and other individuals.

Confidentiality
The research data (review forms and any other notes) will be kept in a secure location/on password protected computer and only the primary researchers (Amy
Black and Melissa Heath) and undergraduate research assistants will have access to the data. At the conclusion of the study, all identifying information will be removed, including names, and the data will be kept in the primary researcher's locked office (340-K MCKB).

**Compensation**
You will be compensated for your time with a $10 gift card. You will receive compensation after the conclusion of your participation in the study.

**Participation**
Participation in this research study is voluntary. You have the right to withdraw at any time or refuse participation without any negative consequence.

**Questions about the Research**
If you have questions regarding this study, you may contact Melissa Allen Heath at 801-422-1235 or [Melissa_Allen@byu.edu](mailto:Melissa_Allen@byu.edu) or Amy Black (Amy_Black@byu.edu) for further information.

**Questions about Your Rights as Research Participants**
If you have questions regarding your rights as a research participant, contact IRB Administrator at 801-422-1461; A-285 ASB, Brigham Young University, Provo, UT 84602; [irb@byu.edu](mailto:irb@byu.edu)

**Statement of Consent**
I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.

Name (printed):_________________ Signature_________________ Date_______
介绍
本科研项目由扬百翰大学咨询心理学专业的博士生 Amy Black 和教育学院咨询心理学与特殊教育系的副教授 Melissa Allen Heath 负责开展。研究的目的是对两种针对家长的，以帮助孩子应对灾难或创伤性事件为主题的性命性讲义进行比较。由于您属于此讲义的目标群体，我们邀请您参与到本项研究中。

研究过程
如果您选择参加此项研究，我们将让您阅读两种针对家长的简短的性命性讲义。接下来，我们将对您进行访谈，并询问您对每种讲义的看法。访谈的目的是评估两种讲义的相同与不同处，从而决定每种讲义的优点和劣势。您的参与能够帮助我们了解这些不同类型的讲义文件，从而让我们更有效地将讲义用于心理健康领域。尤其是，在创伤性事件发生后，广泛地将讲义发到社区中。

如果您同意参加本研究项目，以下情况将会发生：
- 我们将对您进行访谈，了解您对帮助孩子应对灾难和创伤性事件的两份性命健康讲义的看法。
- 访谈将在 BYU 校园内面对面进行，在需要的情况下，可以通过电话或视频会议的形式进行。
- 访谈持续大约 1 个小时。
- 在访谈进行之前，进行中，或完成后，你有权随时拒绝参加访谈。如果你不想将自己的回答成为我们的研究的一部分，您有权撤销您的回答并要求我们毁灭所有与您有关的记录。
- 访谈员会在访谈过程中做笔记。为确保记录的准确性，访谈将被录音。
  在任何时候，您都可以中止访谈或拒绝访谈被录音。

风险/不适
参与本项研究的风险极小。由于讲义涉及灾难和创伤性事件，您可能会在阅读和讨论性命健康讲义时感到不适。我们不会询问您的家人关于创伤性事件和灾难的个人信息，如果访谈让您感到不适，您可以选择中止参与本项研究。不完成访谈没有任何消极后果。

获益
参与本项研究不会使您直接获益。然而，我们希望通过您的参与，研究者能找出使讲义变得更加有效的办法。我们相信本研究能帮助研究者更理解如何讲义针对家长和其它个体的心理健康信息。

保密性
研究数据（录音和笔记）将被存放在一个安全的地点，存储在有密码保护的电脑上，并且只有主要研究者（Amy Black 和 Melissa Heath）和本科研究助手能够接近研究数据。在研究项目完成时，所有识别性信息将会被移除（包括姓名），研究数据将被存放在主要研究者的带锁的办公室（340-K MCKB）。

Institutional Review Board
BYU
8-25-2016  8-24-2017
Approved  Expires
补偿
我们将给您 10 美元礼品卡来补偿您的时间。您将在参与结束后收到礼品卡。

参与
参与本项目是自愿的。您有权在任何时候退出或拒绝参与，这样做不会造成任何消极后果。

关于本研究的问题
如果您对本项目有任何问题，您可以联系 Melissa Allen Heath（电话 801-422-1235；邮箱 Melissa_Heath@byu.edu）Amy Black（邮箱 Amy_Black@byu.edu）。

关于您作为参与者的权利的问题
如果您对您作为参与者的权利有任何问题，请联系 IRB 的管理者（电话 801-422-1461；地址 A-285 ASB, Brigham Young University, Provo, UT 84602；邮箱 irb@byu.edu）。

知情声明
我已经阅读、理解，并得到上述知情同意书的副本，并且自愿参加此项研究。
姓名（印刷体）：____________________
签名：__________________________ 日期 ______

Institutional Review Board
8-25-2016  8-24-2017
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Introducción
Este estudio está dirigido por Amy Black, una estudiante doctorada de Consejería Psicológica de Brigham Young University (BYU), y Melissa Allen Health, Profesora Asociada en el departamento de CPSE del McKay School of Education de BYU. El propósito del estudio es comparar dos traducciones de un folleto para los padres sobre el tema de ayudar a los niños en caso de un desastre o evento traumático. Se le invitó a usted participar porque es un miembro de la población destinataria de este folleto.

Los procedimientos
Si elige participar en este estudio de investigación, se pedirá a usted leer dos versiones traducidas de un folleto breve que está escrito para los padres. Entonces participará en una entrevista cuando le pediremos sus pensamientos sobre cada versión de la traducción. El propósito de la entrevista es examinar las similitudes y las diferencias entre las dos versiones del documento traducido, y determinar las ventajas y las desventajas de cada traducción. Su participación nos ayudará a aprender más de cada tipo de traducción y cómo pueden utilizarse efectivamente en la escena de atención de salud mental y cuando distribuido ampliamente en un entorno comunitario después de un evento traumático.

Si decide participar en este estudio de investigación, lo siguiente pasará:
- Usted se entrevistará sobre sus percepciones y pensamientos respecto a las dos traducciones breves de un documento de salud mental sobre el ayudar a los niños responder a los desastres y los eventos traumáticos.
- Esta entrevista se realizará en persona en el campus de BYU, por teléfono o por videoconferencia si es necesario.
- La entrevista se requerirá aproximadamente una hora.
- Tiene el derecho de negar (decidir no) participar en cualquier momento antes, durante o después de la entrevista. También tiene el derecho de retirar sus respuestas de la entrevista y pedir que las grabaciones sean destruidas si decide que no quiera que sus respuestas sean incluidas en nuestro estudio.
- El entrevistador apuntará notas durante la entrevista, y el audio de la entrevista será grabada para asegurar que anotamos sus respuestas con exactitud. En cualquier momento, tiene el derecho de parar la entrevista o negar que la entrevista sea grabada.

Riesgos/Inconvenientes
Hay riesgos mínimos al participar en este estudio. Es posible que sienta incomodo al leer o comentar sobre el folleto de salud mental porque trata de los desastres y los eventos traumáticos con términos generales. No se le pedirá hablar de eventos traumáticos ni desastres que le han pasado a usted o alguien en su familia. Si la experiencia de la entrevista llegue ser incomodo, puede elegir terminar su participación en el estudio. No hay repercusiones negativas por no cumplir la entrevista.

Los beneficios

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No hay beneficios directos para usted. Sin embargo, se espera que por medio de su participación, los investigadores aprenderán cómo hacer el hecho de traducir más eficaz y eficiente. Creemos que este estudio ayudará a los investigadores entender mejor cómo traducir información de la salud mental para los padres y otros individuos.

Confidencialidad
La información de la investigación (las grabaciones del audio y las notas manuscritas) será guardada en un lugar seguro, en una computadora con contraseña. Solo los investigadores principales (Amy Black y Melissa Heath) y los estudiantes ayudantes tendrán acceso a la información. Al final del estudio, toda la información identificadora será eliminada, incluyendo los nombres, y la información será guardada en la oficina cerrada del investigador principal (340-K MCKB).

Compensación
Usted será recompensado por su tiempo con una tarjeta de $10. Recibirá la compensación después de que termine su participación en el estudio.

Participación
La participación en este estudio de investigación es voluntaria. Tiene el derecho de retirar en cualquier momento o negar a participar sin recibir ninguna consecuencia negativa.

Las preguntas sobre la investigación
Si tiene preguntas respeto a este estudio, puede contactarse con Melissa Allen Heath al 801-422-1235 o [Melissa_Heath@byu.edu], o Amy Black a [Amy_Black@byu.edu] para más información.

Preguntas sobre sus derechos como participantes en la investigación
Si tiene preguntas con respeto a sus derechos como participante en la investigación, contactarse con el Administrador del IRB a 801-422-1461; A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu

Declaración del consentimiento
He leído, entendido y recibido una copia del consentimiento arriba y deseo participar en este estudio por voluntad propia.

Nombre y apellido (en letra de molde):
Firma: ____________________________________ Fecha: ______

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