

2015

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Recommended Citation

Chen, Roy K., Wilaiporn Kotbungkair, and Alicia D. Brown. 2015. "A Comparison of Self-Acceptance of Disability between Thai Buddhist and American Christians." *Journal of Rehabilitation* 81 (1): 52–62.

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A Comparison of Self-Acceptance of Disability between Thai Buddhists and American Christians

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Having a disability can significantly change a person's life in many aspects. Research has shown that people with disabilities collectively have diminished access and fewer opportunities to pursue education, find gainful employment, and engage in intimate relationships. Self-acceptance of disability is, therefore, critical to help build resilience, confidence, and psychological well-being in this population. The purpose of the study was to compare the self-acceptance of disability in international settings, specifically in the context of religions. The sample of the study included 98 Thai Buddhists and 95 American Christians with neuromuscular disorders. Constructs used for the study included demographic characteristics, *Hope Scale* (Snyder et al., 1991), *Future Time Orientation Scale* (Gjesme, 1979), *Spiritual Well-Being Scale* (Paloutzian & Ellison, 1991), and *Acceptance of Disability Scale-Revised* (Groomes & Linkowski, 2007). The self-acceptance of disability multiple regression model to predict Thai Buddhists shows their spiritual well-being, age, number of years since diagnosis, and sex are significant contributing variables. Significant predictors in the regression model to explain the variance of self-acceptance of disability among American Christians include hope, spiritual well-being, and number of years since diagnosis. Discussion, limitations of the study, and implications are also discussed.

Disability is a phenomenon that is ubiquitous around the world and its meaning varies greatly across religions and cultures. Disability has been characterized as a series of losses with which one must adjust, including the loss of a sense of control over one's destiny, the loss of the ability to plan for the future, and the loss of a sense of fairness in the world (Fine, 1991). Factors such as religion and spiritual well-being (i.e., an inclination to find understanding through

one's relationships with a higher power, others and self) are believed to have influence on the adjustment to and acceptance of a disability (Reed, 1992). Research supports religion as a means of coping with a disability (Kaye & Raghavan, 2002). More precisely, religious belief is identified as one's spiritual perspective and refers to rituals, values, and external formal systems of beliefs. However, beliefs regarding the origins of the universe and life differ substantially among diverse groups of people and are often particularly associated with religious worldviews. Although religion is recognized as an essential component in the world of disability (Treloar, 2002), individual perspectives of disability have been noticeably absent from recent discussions and discourse (Yong, 2011).

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For the purpose of this empirical study, the authors will use religion in reference to Buddhism and Christianity. The

two religions approach the topic of self-acceptance in regard to disability from somewhat different angles. Buddhism is mainly practiced in the Far East, Southeast Asia, and part of the South Asia Indian continent, while Christianity has long secured a solid foothold in Europe and the Americas (Crane et al., 2009). Buddhism draws on the teachings of Buddha and Christianity is based off of the teachings of Jesus Christ. Buddhists believe Buddha did not die for the deliverance of people; instead, Buddhism is an individual effort to shed light on nirvana for the common people. In contrast, Christians believe Jesus Christ died for their sins and their salvation is not an independent effort.

Views on Disability in Religion

As spiritual beings, humans seek to understand the reason and purpose of disability. A spiritual question may sound like "What does disability mean to me?" or "Is there a purpose and meaning behind this disability?" A variety of spiritual coping strategies, both religious and nonreligious, may be utilized when an individual is learning to cope with or accept a disability (Baldacchino & Draper, 2001). Buddhism claims that the higher power, Buddha, is equally present in all beings and every part of existence, while Christianity teaches that human beings are born spiritually separate from the higher power, God, due to the original sin committed by Adam and Eve. Religious belief systems, aside from formal religious practice, may be instrumental in promoting acceptance and giving meaning to disability (Bennett, Deluca, & Allen, 1995; Rehm, 1999). Some studies have suggested there are belief differences concerning disability; however, they tend to fall short of focusing on the individual perspective of accepting disability (Schumm, 2010; Swinton, 2011; Yamey & Greenwood, 2004). One philosophical point of view on disability where the two religions diverge from each other is this: The Buddhist tenet of karma suggests that people with disabilities have earned their unfavorable rebirths (Cho & Hummer, 2001; Hampton, 2000) whereas Christian dogmas center on an afterlife in heaven.

Buddhism

Historically, people with disabilities have been excluded from participating in many sociocultural and religious practices (Miles, 2002). In recent decades, scholars and practitioners have begun to investigate the Buddhism tenets relevant to disability and people with disabilities (Miles, 2002). Much of the Western world has gradually become more aware of Buddhist traditions and practices, but many misconceptions and erroneous assumptions about Buddhism philosophies and beliefs still exist (Crane et al, 2009; Wallace, 2006). The belief of reincarnation is related to one's *karma*, the concept concerned with the effects of past decisions on the later rewards or reckoning in the present and future well-being (Hui & Coleman, 2012). Charlton (1998) also discussed reincarnation and the status of disability among Buddhists who felt their disabilities were a direct result of past life deeds. In a pilot qualitative study of healthcare professionals and religious leaders from six major religions, Yamey and Greenwood (2004) found that the explanations of illness by the Buddhist participants tend-

ed to place emphasis on karma relating to unfortunate events, which occurred because of an individual's past transgressions. Subsequently, a disability is usually equated with perpetual suffering and pain. The truth of an end to suffering in Buddhism has meanings related to suffering in life, on earth, or in spiritual life (Hampton, 2000). Buddhists suggest that the Buddha can guide them the way out of *samsara*, the nearly endless round of rebirth with all its suffering and pain. In contrast, Christianity promises an end to suffering and pain and, more importantly, an eternal life.

Christianity

Christianity is the one of the most common religious belief systems practiced in the United States. The Bible is almost unequivocally written in the viewpoint of individuals without disabilities (Hull, 2003). When God is believed to have powers of sight beyond the ordinary and powers of knowledge beyond the average, it leaves people pondering what this might suggest about persons with disabilities? (Joeckel, 2006). In Christianity the notion of a perfect God is exuded in art, music, literature, offerings, and rituals. Animals with any hints of imperfection are strictly forbidden to be offered to God, likewise, high priests selected to perform solemn worship rites at the temple or church must be able-bodied and have sound minds. God is indeed portrayed as an individual without a disability and Jesus as the miracle worker, who walked with disciples, who, in order to spread the gospel, also lived without disabilities. Researchers point out that the figure of God in the Bible is a stark projection of a human without a disability; therefore, the society's exclusion of those who are different, such as individuals with disabilities, is not alarming after all (Eiesland, 1994; Hull, 2003). These images and stories of a perfect God cause bewilderment to individual perceptions regarding disability. The exclusive representation of Jesus Christ is that of a healer; therefore, Eiesland (1994) wrote extensively in reference to the "disabled God," which focuses on post-resurrection Jesus Christ with impaired hands and feet while suggesting fair treatment of people with disabilities. She suggests the power of identification constitutes a moment of validation for people with disabilities and spiritual empowerment.

The healing power of God in Christianity should not be regarded lightly by researchers as sheer superstition. Prayer and a belief in the afterlife have been found to provide cancer patients with slivers of hope for the future as they dealt with end-of-life issues head-on (O'Connor, Wicker, & Germino, 1990). Some Christian leaders question the church for its failure to provide clear instructions on addressing disability and its associated concerns (Blair, 1994; Eiesland, 1994). The church is sometimes unaware that even with the best of intentions, the Christian approach to counseling people may induce more distress than offer comfort (Joeckel, 2006). For instance, telling a person who has just sustained a spinal cord injury that the disability is meant to happen probably will not help assuage any of his or her deep anguish and despair.

Society, Discrimination and the Acceptance of Disability

It comes as no surprise that when measuring equality, people with disabilities tend to occupy the lowest rungs of the social ladder. Despite the passing of the 1990 Americans with Disabilities Act, which mandated an inclusive environment for the acceptance and integration of people with disabilities, stigma and discrimination continue to exist in society. Many people with disabilities face rejection and ostracism until they successfully prove themselves in various aspects of life. To cope with the involuntary negative views bestowed upon them by society, people with disabilities must first internalize a schema to accept their own disabilities. Self-acceptance is defined as an individual's satisfaction or happiness with him or herself. Acceptance of disability has regularly been associated with the acceptance of loss (Dembo, Levitan, & Wright, 1972; Glueckauf, 1993). Alternatively, the lack of acceptance can be conceptualized in the form of an adjustment disorder (DSM-V, 2013). Failure to accept the long-term limitations of a new health condition or disability can increase psychological distress. Consequently, it can not only further exacerbate adjustment difficulties but also in turn delay the person's adaptation to his or her changed personal circumstances. It is, therefore, intriguing to see why some people with acquired disabilities seem to react to their new disability identify positively while others respond negatively.

A large body of research focuses on the public response to people with disabilities and the inability of society to remove environmental and social barriers. At-Turki (2012) stresses the need to feature people with disabilities in positive roles in the media in order to change societal negative stereotypical views and perceptions. Deal (2006) measured the attitudes of people with and without disabilities towards other people with impairments using a prejudice scale. The results revealed that both groups of participants expressed similar degrees of negative attitudes. In other words, people regardless of their disability status may hold subtle forms of prejudice towards disability.

Future Time Orientation

People's perspective of time helps shape how they manage the challenges and adversities in life (Lens, 1984). The sense of time, or the orientation towards living in the present or living in the future, serves as a coping mechanism for people after the onset of a disability. Future time orientation can be understood as the degree to which an individual's thoughts and actions are engaged or involved with the future (Livneh, 2012, 2013; Martz, 2003). Underlying the concept of time is the individual's willingness to delay instant gratification in anticipation of attaining a more promising future or reward (Gjesme, 1979). A simplistic scenario would be for a college student to decide whether to go out with friends to watch a movie or to go to the library to study the night before an important examination. The choice made will pose greater stakes and consequences if the student is intent on attending a medical school, where good grades are often one of the most critical admission criteria. Likewise, future time orientation can have

an impact on how people with disabilities adjust and accept their chronic illnesses and disabilities (Martz, 2003; Martz & Livneh, 2003). Kielhofner (1977) suggests that perhaps individuals with a later onset of physical disability may experience temporal disturbances due to the excessive amount of time required to perform formerly-known routines. Similarly, in a study of 317 individuals with spinal cord injuries, Martz (2003) found depression, shock, and self-acceptance to be significant predictors of fluctuations in future time orientation among such individuals. Although research has discussed future time orientation in relation to disability, few studies have used religion as a predictor variable. Compared to those who scored lower in future time orientation, Oner-Ozkan (2007) found that individuals who scored higher in future time orientation also scored high in the level of belief in God and level of interest about the future beyond death. Psychologists have mentioned that Buddhists do not place emphasis on the future as much because it generates expectations that may lead to suffering if they are not fulfilled (Charlton, 1998). On the other hand, Christians tend to focus on the future in reference to the afterlife with God in heaven. To them, disability presents only a temporary inconvenience and setback to their existence while on earth. The time of salvation will eventually come when they can truly enjoy an eternal, carefree and pain-free life with God.

Hope

Positive mind sets have been identified with successful coping and good health, while despair and hopelessness have been linked to illness and disability (Scioli et al., 1997). Dorsett (2010) presented results from a 10-year longitudinal study of 46 people with spinal cord injuries, suggesting that hope was an essential factor that helped them cope with their injuries. Hope has emerged as a key element of adjustment, evaluation, and the reconstruction of meaning following injury. Hope is considered multifaceted and consists of three components: affective, cognitive, and collaborative (Farran, Herth, & Popovich, 1995). There are, of course, individual differences in the level of hopefulness especially when acquiring a disability (Dorsett, 2010).

People's level of hope influences their outlooks on life. In general, hope has been established as having a negative relationship with depression and a positive relationship with satisfaction with life (Chang, 2003). Research further suggested a correlation between hope and health outcomes. In a study of 196 parents of children with intellectual disabilities, Snyder et al. (1996), examined their feelings of hope, positive affects, and psychological well-being. The findings of the study revealed that lower levels of hope and more child behavior problems led to parents' depression. They further recommended the inclusion of hope as a factor in the study of how people with disabilities cope with stress.

Spiritual Well-Being

For decades researchers have encouraged the incorporation of spirituality and religion into clinical practice (Green,

Benshoff, & Harris-Forbes, 2001). However, very little empirical research has been conducted to assess the role of spirituality on self-acceptance among people with disabilities. Spirituality has been defined in a number of ways, including the way in which individuals answer to all-things sacred (Gaventa, 2001) and the need to find meaning in their existence (Canda, 1999). Spirituality brings meaning and strength during difficult times for people with disabilities; therefore, views of illness and disability are connected with spiritual beliefs (Zhang, Bennett, & Hojnar, 2001).

Disparity exists in opinions as to how spiritual well-being should be addressed between healthcare providers and their patients. Oyama and Koenig (1998) found that 91% of patients indicated that their physicians did not ask questions about spiritual or religious beliefs, and 83% of them wanted their physicians to discuss spiritual or religious beliefs with them. A study by Kozak (2001) found that participants with rheumatoid arthritis indicated that spirituality was beneficial in accepting and dealing with pain. Cadge and Daglian (2008) analyzed 683 written prayers by 536 staff, visitors, and patients. The researchers determined that 21.8% were prayers written to give God thanks, 28% were written as requests, and 27.5% were written to express thankfulness and a request of God. The results from this study suggest that the shift in thinking of the relationship between God or a spiritual power and humans from an authoritarian view to a more psychologically or emotionally supportive relationship can help provide meaning and understanding for people with disabilities.

Although religion is a predictor variable used in behavioral and psychological research to examine adjustments to a disability, to the knowledge of the authors no study has attempted to compare the attitudes of disabled believers from two religions, differing markedly in their philosophically nature living in two countries. Therefore, the purpose of this study was to compare the self-acceptance of one's disability in international settings, specifically in the context of religions. The two research questions that guided the study were as follows: (1) Are there differences in the levels of self-acceptance in regard to disability among Thai Buddhists and American Christians? and (2) What factors are predictive of self-acceptance in regard to disability in Thai Buddhists and American Christians?

Method

Participants

A total of 98 Thai Buddhists with neuromuscular disorders participated in the study (50 males, 48 females). The average age of the participants was 51.04 ($SD = 17.26$) years old, ranging from 18 to 92. The average number of years since the diagnosis of a disability was 20.48 ($SD = 17.80$), ranging from 2 months to 78 years. The marital status of the Buddhist sample was 38 (38.8%) people were never married, 37 (37.8%) people were married, 4 (4.1%) people were divorced, and 19 (19.4%) people who were widowed. In terms of educational attainment, 73.5% ($n = 72$) had less than a high school education, 15.3% ($n = 15$) finished high school, 8.2% ($n = 8$)

had an associate degree, and 3.1% ($n = 3$) had a bachelor's degree. With regard to employment status, 6.1% ($n = 6$) worked full-time, 5.1% ($n = 5$) worked part-time, 17.3% ($n = 17$) were self-employed, 6.1% ($n = 6$) were retired, 12.2% ($n = 12$) were homemaker, 1.0% ($n = 1$) was student, and 5.2% ($n = 51$) were unemployed.

A total of 95 American Christians with neuromuscular disorders participated in the study (39 males; 56 females). The average age of the participants was 47.67 ($SD = 13.97$) years old, ranging from 18 to 84. The average number of years since the diagnosis of a disability was 20.32 ($SD = 14.47$), ranging from 1 to 56 years. The marital status of the Christian sample was 33.7% ($n = 32$) were never married, 52.6% ($n = 50$) were married, 12.6% ($n = 12$) were divorced, and 1.1% ($n = 1$) was widowed. In terms of the level of education, 1.1% ($n = 1$) had less than a high school education, 37.9% ($n = 36$) finished high school, 11.6% ($n = 11$) had an associate degree, 33.7% ($n = 32$) had a bachelor's degree, and 15.8% ($n = 15$) had a graduate degree. With regard to employment status, 21.1% ($n = 20$) worked full-time, 6.3% ($n = 6$) worked part-time, 5.3% ($n = 5$) were self-employed, 26.3% ($n = 25$) were retired, 10.5% ($n = 10$) were homemakers, 11.6% ($n = 11$) were students, and 18.9% ($n = 18$) were unemployed.

Measures

Hope Scale (HS: Snyder, Harris, Anderson, Holleran, Irving, et al., 1991). The HS is a 12-item self-report instrument designed to measure the magnitude of hope in people. Participants rate themselves by using a 4-point Likert type scale (1 = definitely false to 4 = definitely true). Four distractor items #3, 5, 7, and 11 are removed from the summation of scores. The possible scores range from 8 to 32; where higher scores on the HS indicate higher level of hope. The Cronbach's α coefficients for the Christian and Buddhist samples were .829 and .735, respectively.

Future Time Orientation Scale (FTOS: Gjesme, 1979). FTOS consists of 14 items that are rated on a 4-point Likert type scale (1 = *is very true of me*, 2 = *is fairly true of me*, 3 = *is not too true of me*, 4 = *is not true at all of me*). Items #1, 3, 4, 5, 6, 7, 8, 9, 11, 12, and 13 are reversely scored, with a possible scores range of 4 to 56. Higher scores on the instrument indicate a stronger orientation toward distant rewards and goals in the distant future. The internal reliability of the FTOS has been measured in terms of Cronbach's α coefficient ranging from .57 (Martz & Livneh, 2003) to .67 (Halvari, 1991). For this study, the Cronbach's α coefficient for the Christian and Buddhist samples were .564 and .722, respectively.

Spiritual Well-Being Scale (SWBS: Paloutzian & Ellison, 1991). SWBS consisted of two 10-item subscales, namely, the Religious Well-Being (RWB) and the Existential Well-Being (EWB). Each item uses a 6-point Likert type scale (1 = *strongly disagree* to 6 = *strongly agree*). Items #1, 2, 5, 6, 9, 12, 13, 16, and 18 are reversely scored. The possible total score ranges from 20 to 120. The Cronbach's α coefficient for the Christian and Buddhist samples were .920 and .810, respectively.

Acceptance of Disability Scale-Revised (ADS-R; Groomes & Linkowski, 2007). The construct of self-acceptance of disability was measured using the ADS-R, an instrument with 32 items rated on a 4-point Likert type scale (1 = *strongly disagree* to 4 = *strongly agree*). Items require reverse scoring include #1, 2, 4, 5, 7, 8, 9, 10, 11, 13, 14, 15, 17, 19, 20, 22, 23, 24, 26, 27, 30, and 31. Possible scores range from 32 to 128. Previous study shows the instrument had a Cronbach's α coefficient of .89 (Jo, Chen, & Kosciulek, 2010). For the present study, the Cronbach's α coefficient for the Christian and Buddhist samples were .934 and .894, respectively.

Procedure

American Christian participants were recruited from support groups for people with neuromuscular disorders in a Midwestern state. Survey packets, containing an introductory flyer, an informed consent form, the questionnaire and a prepaid postage envelope, were left with support group coordinators to be distributed during the sessions. The Thai Buddhist participants were people with neuromuscular disorders recruited at a large metropolitan public hospital. Research assistants explained the purpose of the study to patients who were receiving treatments at the facility. All materials were translated in Thai first and then translated back to English separately by two U.S. educated bilingual researchers to ensure accuracy and validity of the statements. The amount of time required to complete each survey was approximately 15 minutes.

Data Analysis

Both descriptive and inferential statistics were utilized to analyze the data. An independent-samples *t*-test and a chi-square test of independence examined differences in the demographic characteristics of the Buddhist and Christian samples. To understand the differences in the extent of self-acceptance of disability among participants with respect to their sex and religion, a two-way factorial ANOVA was conducted. A one-way ANOVA was chosen to analyze the effect of educational attainment on the dependent variable. Two separate hierarchical multiple regression analyses were performed to explain the variances in the dependent variable for the Buddhist and Christian samples. Demographic variables were entered in the first step of the regression model. Additional predictor variables were entered in the second step of the regression model. Multicollinearity was inspected by calculating the collinearity statistics such as tolerances and variance inflation factors.

Results

An independent-samples *t*-test was calculated to compare the mean age of Buddhist participants with the mean age of Christian participants. The mean age of Buddhists ($M = 51.04$, $SD = 17.26$) was not statistically different from the mean age of Christians ($M = 47.67$, $SD = 13.97$), $t(188) = 1.471$, $p > .05$. The number of years since the diagnosis of a disability for Buddhists ($M = 20.48$, $SD = 17.80$) was not statistically different from that of Christians ($M = 20.32$, $SD = 14.47$), $t(191) = -.068$, $p > .05$. A chi-square test of independence was calculated to compare the frequency of educational attainment in Buddhists and Christians. The results revealed that there was

a significant difference in the level of education between the two groups, $\chi^2(4) = 117.186$, $p < .001$. Christian participants had received more education than their Buddhist counterparts.

A 2 (sex) x 2 (religion) between-subjects factorial ANOVA was calculated comparing the level of self-acceptance of disability for participants with respect to on their sex and religion. A significant main effect for sex was found, $F(1, 118) = 4.704$, $p < .05$, $\eta^2 = .024$. Female participants ($M = 93.65$, $SD = 1.45$) were more accepting of their disability than male participants ($M = 89.00$, $SD = 1.58$). A significant main effect for religion was found, $F(1, 118) = 73.104$, $p < .001$, $\eta^2 = .280$. Christian participants ($M = 100.48$, $SD = 1.54$) were more accepting of their disability than Buddhist participants ($M = 82.17$, $SD = 1.49$). However, the interaction between sex and religion was not significant, $F(1, 118) = .929$, $p > .05$, $\eta^2 = .005$.

A one-way ANOVA was calculated to compare the level of self-acceptance of disability for participants with regard to their educational attainment. Participants who had a graduate degree, a bachelor's degree, and an associate degree were combined into one category due to small representations in numbers for the first two groups. A significant difference was found among participants of three levels of educational attainment, $F(2, 189) = 26.081$, $p < .001$. Tukey's HSD was used to determine the nature of the difference among three different levels of educational attainment. This analysis revealed that participants with less than a high school education ($M = 81.04$, $SD = 10.66$) were less accepting of their disability than participants with a college education ($M = 98.72$, $SD = 20.19$). Participants with less than high school education were also less accepting of their disability than participants with high school ($M = 96.57$, $SD = 14.52$). The difference in self-acceptance of disability between participants with a high school education and those with at least a college education was not statistically significant, $p = .737$.

Table 1 displays the means, standard deviations and bivariate correlations of the research variables. For the Buddhist sample, the correlation between self-acceptance of disability and age was significant, $r = -.238$, $p < .05$. The correlation between self-acceptance of disability and years since diagnosis of disability was significant, $r = .282$, $p < .01$. The correlation between self-acceptance of disability and hope was significant, $r = .223$, $p < .05$. The correlation between self-acceptance of disability and future time orientation was significant, $r = -.373$, $p < .01$. The correlation between self-acceptance of disability and spiritual well-being was significant, $r = .664$, $p < .01$. The correlation between future time orientation and spiritual well-being was significant, $r = -.360$, $p < .01$. For the Christian sample, the correlation between self-acceptance of disability and hope was significant, $r = .663$, $p < .01$. The correlation between self-acceptance of disability and spiritual well-being was significant, $r = .371$, $p < .01$. The correlation between hope and future time orientation was significant, $r = -.239$, $p < .05$.

Table 2 displays summary of hierarchical multiple regression analyses predicting self-acceptance of disability for Buddhists and Christians. To examine the Buddhist sample, a hierarchical multiple regression was performed by entering demographic variables that consisted of age, sex, number of years since diagnosis of disability, education, marital status, and employment status as a block in the first step. The preliminary model for Buddhists was statistically significant, $F(6, 90) = 4.440, p = .001$ with an R^2 of .228 and an adjusted R^2 of .177. The standardized β for age was $-.215, p = .031$. The standardized β for years since diagnosis of disability was $.246, p = .013$. The standardized β for marital status $.199, p$

$= .044$. Additional predictor variables including hope, future time orientation, and spiritual well-being were then added to a subsequent model in the second step. The final regression equation was found to be statistically significant, $F(9, 87) = 13.753, p < .001$ with an R^2 of .587 and an adjusted R^2 of .545. The change in R^2 was .359 and the change in adjusted R^2 was .368. Collinearity statistics showed that tolerances for all variables were well above .63 (1 - adjusted R^2), indicating there was not a problem with multicollinearity. The beta weights show that four out of 10 variables significantly contributed to predicting the dependent variable. The largest standardized β was spiritual well-being $= .625, p < .001$. The second largest

Table 1

Means, Standard Deviations, and Zero-Order Correlations of Research Variables

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | Mean | SD |
|---------------------|---------|--------|-------|--------|---------|---|--------|-------|
| Thai Buddhists | | | | | | | | |
| 1 | - | | | | | | 82.15 | 11.80 |
| 2 | -.238* | - | | | | | 51.04 | 17.26 |
| 3 | .282** | -.168 | - | | | | 20.48 | 17.80 |
| 4 | .223* | .090 | -.100 | - | | | 21.27 | 4.11 |
| 5 | -.373** | .200** | -.183 | .048 | - | | 33.62 | 6.08 |
| 6 | .664** | .083 | .047 | .358** | -.360** | - | 79.17 | 11.83 |
| American Christians | | | | | | | | |
| 1 | - | | | | | | 101.08 | 17.43 |
| 2 | .114 | - | | | | | 47.67 | 13.97 |
| 3 | .165 | .108 | - | | | | 20.32 | 14.47 |
| 4 | .663** | .167 | .029 | - | | | 25.74 | 3.65 |
| 5 | -.194 | -.096 | .049 | -.239* | - | | 29.77 | 4.64 |
| 6 | .371** | .114 | -.071 | .295** | -.088 | - | 82.49 | 16.56 |

Note. 1 = Self-acceptance of disability, 2 = Age, 3 = Years since diagnosis of disability, 4 = Hope, 5 = Future time orientation, 6 = Spiritual well-being.

* $p < .05$, ** $p < .01$

standardized β was age = $-.271, p < .05$. The third largest standardized β was number of years since diagnosis of disability = $.166, p < .05$. The fourth largest standardized β was sex = $-.151, p < .05$. According to the regression model, 54.5% (a large effect, Cohen, 1988) of the variances in the Buddhists' self-acceptance of their disability can be predicted from the research variables.

To examine the Christian sample, a hierarchical multiple regression was performed by entering demographic variables consisted of age, sex, years since diagnosis, education (1 = associate's degree or less), marital status, and employment status as a block in the first step. The preliminary model was statistically significant, $F(6, 85) = 2.513, p < .05$ with an R^2 of $.151$ and an adjusted R^2 of $.091$. The standardized β for sex = $-.247, p < .05$. Additional predictor variables including hope, future time orientation, and spiritual well-being were then added to a subsequent model in the second step. The final regression equation was found to be statistically significant, $F(9, 82) = 10.402, p < .001$ with an R^2 of $.533$ and an adjusted R^2 of $.482$. The change in R^2 was $.382$ and the change in adjusted R^2 was $.391$. Collinearity statistics showed that tolerances for all variables were well above $.52$ ($1 - \text{adjusted } R^2$), indicating that there was not a problem with multicollinearity. The beta weights show that three out of 10 variables significantly contributed to predicting the dependent variable. The largest standardized β was hope = $.574, p < .001$. The second largest standardized β was spiritual well-being = $.190, p < .05$. The third largest standardized β was number of years since diagnosis of disability = $.168, p < .05$. The standardized β for future time orientation was not statistically significant = $-.033, p = .678$. According to the regression model, 48.2% (a large effect, Cohen, 1988) of the variances in the Christians' self-acceptance of their disability can be explained from the research variables.

Discussion

The World Health Organization International Classification of Functioning, Disability, and Health holistic framework recommends that research on the adjustment to disability be conducted in the contexts of an individual's health condition and his or her environmental factors (Chan, Chronister, & da Silva Cardoso, 2009). The present research investigated the effects of future time orientation, hope, spiritual well-being, age, sex, level of education, marital status, years since diagnosis, and employment status on an individual's self-acceptance in regard to disability. Overall, the findings of the study reveal noteworthy differences and similarities in the self-acceptance of one's disability between Thai Buddhists and American Christians. This study utilized the multiple regression model to predict Thai Buddhists' self-acceptance in regard to disability, which showed that spiritual well-being, age, number of years since diagnosis, and sex are significant contributing variables. The significant predictors in the regression model to explain the variance of self-acceptance in regard to disability among American Christians include hope, spiritual well-being, and number of years since diagnosis.

Consistent with previous research (Chen & Crewe, 2009), the female participants in both countries were more accepting of their own disabilities than the male participants. It is plausible that gender-role expectations, which exist in most societies, make it difficult for men, with or without disabilities, to seek out instrumental and emotional support when facing personal problems in life (Barbee et al., 1993). Furthermore, because men are traditionally seen as the primary breadwinners for their families, the inability to work due to a debilitating health condition only further compounds the psychological stress and diminishes self-esteem. The role reversal change not only shatters men's long-held perceived superiority in a family structure, but also emasculates them psychologically.

In the present study, the Christian participants seem to be dealing with their disabilities psychologically better than the Buddhist participants. People often draw strength from their religions in times of dire straits (Crane et al., 2009). Interestingly enough, although the teachings and tenets of major religions interpret the meaning and purposes of life differently, future time orientation was not an influential factor in shaping the forward-looking mindsets of Christians and Buddhists with disabilities when dealing with disability-related challenges and issues in life. Contradictory to the findings of a 2004 study conducted by Martz, future time orientation was not a statistically significant predictor of the self-acceptance of one's disability among both American Christians and Thai Buddhists in the present study. Martz and Livneh (2007) posit an explanation that the level of denial of having had a disability is highly correlated with future time orientation because "thinking about and planning for one's future may be more indicative of the thought processes that are reflected in the acknowledgment of disability." Perhaps the here-and-now mode that the participants adopted is more suitable to generating immediate solutions for the barriers and hurdles, which they encounter on a daily basis. It may also arise because their disability does not permit them the luxury of time to reflect on their future. Rehabilitation professionals and healthcare providers play a critical role in facilitating the adaptation of individuals with disabilities to their new condition and environment by addressing feelings, thoughts, and self-perceptions (Martz, 2004).

Of the three educational attainment categories, participants with a college education or with a high school education reported being able to accept of their neuromuscular disorders better than their counterparts who did not have a high school education. Quality of life is positively correlated with the acceptance of disability (Chen & Crewe, 2009). Individuals with more education may know their legal rights and know where to find resources, disability services, and vocational rehabilitation via reading and searching on the Internet. Individuals with disabilities who are more informed understand how they can benefit from using assistive technology to improve their quality of life and to help them become more independent and less reliant on the assistance from caregivers.

Consistent with a study of 46 individuals with spinal cord injuries (Dorsett, 2010), hope was an important coping mech-

anism. The correlation between hope and self-acceptance of one's disability found in Buddhists and Christians is not surprising. In both religions, God and Buddha are thought to be merciful and forgiving, who provide comfort and care for the suffering multitudes. Hope transforms into a form of motivational force that allows people with disabilities to cope with seemingly difficult situations. Hope represents the ray of light

beaming at the distant end of the tunnel. The fact that hope and future time orientation are negatively correlated indicates that people with disabilities are cognizant of the reality that many decisions in their lives have to be made on a here and now basis. Moreover, previous studies by Kozak (2001) also support the present study's notion that spirituality and views toward disability are interconnected. Such a line of postula-

Table 2

Summary of Hierarchical Multiple Regression Analysis Predicting Self-Acceptance of Disability

| Variable | B | SE B | β | R^2 | ΔR^2 | t |
|----------------------------|--------|-------|---------|-------|--------------|--------|
| Thai Buddhists | | | | | | |
| Step 1 | | | | .228 | | |
| Age | -.147 | .067 | -.215* | | | -2.197 |
| Sex | -3.718 | 2.292 | -.158 | | | -1.622 |
| Years since diagnosis | .164 | .065 | .246* | | | 2.521 |
| Education | 3.037 | 2.601 | .115 | | | 1.168 |
| Marital status | 4.807 | 2.354 | .199* | | | 2.042 |
| Employment status | 3.299 | 2.714 | .126 | | | 1.216 |
| Adjusted $R^2 = .177$ | | | | | | |
| Step 2 | | | | .587 | .359 | |
| Age | -.185 | .051 | -.271** | | | -3.588 |
| Sex | -3.554 | 1.730 | -.151* | | | -2.054 |
| Years since diagnosis | .110 | .049 | .166* | | | 2.241 |
| Education | 1.007 | 2.019 | .038 | | | .499 |
| Marital status | .412 | 1.823 | .017 | | | .226 |
| Employment status | 1.826 | 2.080 | .070 | | | .878 |
| Hope | .011 | .231 | .004 | | | .049 |
| Future time orientation | -.082 | .154 | -.043 | | | -.533 |
| Spiritual well-being | .635 | .085 | .625** | | | 7.460 |
| Adjusted $R^2 = .545$ | | | | | | |
| American Christians | | | | | | |
| Step 1 | | | | .151 | | |
| Age | .101 | .140 | .080 | | | .719 |
| Sex | -8.792 | 3.672 | -.247* | | | -2.395 |
| Years since diagnosis | .234 | .125 | .193 | | | 1.871 |
| Education | 5.170 | 3.819 | .147 | | | 1.354 |
| Marital status | 6.564 | 3.816 | .187 | | | 1.720 |
| Employment status | 2.126 | 4.039 | .057 | | | .526 |
| Adjusted $R^2 = .091$ | | | | | | |
| Step 2 | | | | .533 | .382 | |
| Age | .002 | .108 | .002 | | | .023 |
| Sex | -4.822 | 2.864 | -.135 | | | -1.683 |
| Years since diagnosis | .204 | .095 | .168* | | | 2.138 |
| Education | .871 | 2.946 | .025 | | | .296 |
| Marital status | .715 | 3.026 | .020 | | | .236 |
| Employment status | 2.566 | 3.115 | .069 | | | .824 |
| Hope | 2.765 | .422 | .574** | | | 6.557 |
| Future time orientation | -.124 | .299 | -.033 | | | -.416 |
| Spiritual well-being | .200 | .087 | .190* | | | 2.290 |
| Adjusted $R^2 = .482$ | | | | | | |

* $p < .05$, ** $p < .01$

tion is corroborated by the evidence of a positive correlation between the self-acceptance of one's disability and spiritual well-being reported by the participants of both religions.

A plethora of studies on the different types of disability in the population indicate that the number of years since the diagnosis of a disability is a key determinant of the acceptance of disability (Chen & Crewe, 2009; Krause & Sternberg, 1997; Nicholls et al., 2012). However, the present study can only partially confirm this supposition. While the Thai Buddhists reported a statistically significant relationship, albeit a weak one, between the two variables, the American Christians were unable to produce similar results. When the predictor variable of years since the diagnosis was further entered into the regression models to be performed separately on the Buddhist and Christian samples, the results disaffirmed the findings of the aforementioned studies. Thus, it was concluded that the number of years since the diagnosis was not a statistically significant contributing factor. As Vash and Crewe (2003) poignantly explained, the process of self-acceptance of a disability must be understood as containing multidimensional traits; the individual may resort to the use of rational and logical thinking to manage the reality of living with his or her disability and, at the same time, still mourn and harbor the painful loss of physical or sensory functioning.

Limitations

There are caveats to the generalizability of the research findings. First, the sample size was small given the sparseness of neuromuscular disorders population. Second, the convenience sample of Christian participants in the United States was recruited from post hospitalization support groups, while the Buddhist participants in different stages of recovery were recruited from a rehabilitation hospital in Thailand. There was reservation about suggesting religion to be the sole factor to influence the self-acceptance of one's disability, because there might be confounding environmental variables unique to the societies in which the participants resided. Third, the generalizability of the findings can only be understood in the realm of one disability population. Perhaps people with sensory impairments and mental health issues may see the acceptance of disability differently than the participants with neuromuscular disorders in the present study. In spite of the aforementioned limitations, this study sheds light on one's adjustment to a disability in a multicultural context. Future researchers may wish to focus on clarifying disability-related issues that curb the development of spiritual beliefs. Other research ideas worth exploring include conceptualizing the role of spirituality when coping with a disability and examining how individuals experience the process of accepting disability. Replicating the study with individuals of other faiths, as well as those without a religious background would be useful. In conclusion, this international comparative study affirms the importance of incorporating knowledge of multiculturalism into counseling and rehabilitation practices in health sciences and human services settings. Although people with the same type of disability may undergo similar stages of adjustment, culturally specific fac-

tors also play a vital role in shaping their outlooks on life after the onset of the disability.

Conclusion

The overall findings contribute to a better understanding of self-acceptance in regard to disability among people with neuromuscular disorders who come from different religious backgrounds, particularly Thai Buddhists and American Christians. The clinical implications for rehabilitation professionals and healthcare practitioners include the potential value in considering future time orientation, hope, and spiritual well-being as potential catalysts for greater self-acceptance of disability by clients with religious views who are undergoing rehabilitation. These promising variables warrant further investigation among people of different religions as well as in different disability populations.

References

- At-Turki, J. (2012). Difficulties faced by the employment of the persons with disabilities in the Hashemite Kingdom of Jordan from the viewpoint of vocational trainers and the persons with disabilities and their parents preparation. *European Journal of Social Sciences*, 27(4), 488-510.
- Barbee, A. P., Cunningham, M. R., Winstead, B. A., Derlega, V. J., Gulley, M. R., Yankeelov, P. A., & Druen, P. B. (1993). Effects of gender role expectations on the social support process. *Journal of Social Issues*, 49(3), 175-190. doi: 10.1111/j.1540-4560.1993.tb01175.x
- Baldacchino, D., & Draper, P. (2001). Spiritual coping strategies: a review of the nursing research literature. *Journal of Advanced Nursing*, 34(6), 833-841. doi: 10.1046/j.1365-2648.2001.01814.x
- Bennett, T., Deluca, D. A., & Allen, R. W. (1995). Religion and children with disabilities. *Journal of Religion and Health*, 34, 301-312.
- Blair, W. A. (1994). Ministry to persons with disabilities: Can we do better? *Journal of Religion in Disability and Rehabilitation*, 1, 1-9.
- Brault, M. W. (2012). American with disabilities: 2010. *U. S. Department of Commerce*. 70-131.
- Cadge, W. & Daglian, M. (2008). Blessings, strength, and guidance: Prayer frames in a hospital prayer book. *Poetics*, 36(5-6), 358-373. doi: 10.1016/j.poetic.2008.06.011
- Canda, E. R. (1999). Spirituality sensitive social work: Key concepts and ideals. *Journal of Social Work Theory and Practice*, 1(1), 1-15.
- Chan, F., Chronister, J., & da Silva Cardoso, E. (2009). An introduction to evidence-based practice approach to psychosocial interventions for people chronic illness and disability. In F. Chan, E. da Silva Cardoso, & J. A. Chronister (Eds.), *Understanding psychosocial adjustment to chronic illness and disability: A handbook for evidence-based practitioners in rehabilitation* (pp. 3-19). New York: Springer Publishing Company.

- Chang, E. C. (2003). A critical appraisal and extension of hope theory in middle aged men and women: Is it important to distinguish agency and pathways components? *Journal of Social and Clinical Psychology, 22*(2), 121-143.
- Charlton, J. I. (1998). *Nothing about us without us: Disability oppression and empowerment*. Berkeley, CA: University of California Press.
- Chen, R. K., & Crewe, N. M. (2009). Life satisfaction among people with progressive disabilities. *Journal of Rehabilitation, 75*(2), 50-58.
- Cho, Y., & Hummer, R. A. (2001). Disability status differentials across fifteen Asian and Pacific Islander Groups and the effect of nativity and duration of residence in the U.S. *Social Biology, 48*(3/4), 171-195.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Crane, L. S., Johnson, H. E., Ufholz, K. E., Burns, E. M., Brown, B. R., & Riehle, J. L. (2009). Conceptualizing human nature and the divine: Qualitative interviews with Christians and Buddhists from a mixed-methods study. *Journal of Ethnographic & Qualitative Research, 4*(1), 9-23.
- Deal, M. (2006). *Attitudes of disabled people towards other disabled people and impairment groups*. Unpublished doctoral thesis, City University London, UK.
- Dembo, T., Leviton, G. L., & Wright, B. A. (1975). Adjustment to misfortune: A problem of social psychological rehabilitation. *Rehabilitation Psychology, 22*(1), 1-100. doi: 10.1037/h0090832
- Dorsett, P. (2010). The importance of hope in coping with severe acquired disability. *Australian Social Work, 63*(1), 83-102.
- DSM-V (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Publishing.
- Eiesland, N. L. (1994). *The Disabled God: Toward a Liberatory Theology of Disability*. Nashville, TN: Abingdon Press.
- Farran, C., Herth, K., & Popovich, J. (1995). Hope and hopelessness: Critical clinical constructs. Thousand Oaks, CA: Sage Publications.
- Fine, S. B. (1991). Resilience and human adaptability: Who rises above adversity? *American Journal of Occupational Therapy, 45*(6), 493-503. doi:10.5014/ajot.45.6.493
- Gaventa, W. C. (2001). Defining and assessing the spirituality and spiritual supports: A rationale for inclusion in the theory and practice. *Journal of Religion, Disability, and Health, 5*(2-3), 29-48. doi: 10.1300/J095v05n02_03
- Gjesme, T. (1979). Future time orientation as a function of achievement motives, ability, delay of gratification, and sex. *Journal of Psychology, 101*(2), 173-188.
- Glueckauf, K. C. (1993). Disability and value change: An overview and reanalysis of acceptance of loss theory. *Rehabilitation Psychology, 38*(3), 199-210.
- Green, R. L., Benschoff, J. J., & Harris-Forbes, J. A. (2001). Spirituality in rehabilitation counselor education: A pilot survey. *Journal of Rehabilitation, 67*(3), 55-60.
- Groomes, D. A. G., & Linkowski, D. C. (2007). Examining the structure of the revised Acceptance Disability Scale. *Journal of Rehabilitation, 73*(3), 3-9.
- Hampton, N. Z. (2000). Meeting the unique needs of Asian Americans and Pacific Islanders with disabilities: A challenge to rehabilitation counselors in the 21st century. *Journal of Applied Rehabilitation Counseling, 31*(1), 40-46.
- Hui, V. K., & Coleman, P. G. (2012). Do reincarnation beliefs protect older adult Chinese Buddhists against personal death anxiety? *Death Studies, 36*(10), 949-958. doi: 10.1080/07481187.2011.617490
- Hull, J. M. (2003). A spirituality of disability: The Christian heritage as both problem and potential. *Studies in Christian Ethics, 16*(2) 21-35.
- Jo, S. J., Chen, R. K., & Kosciulek, J. F. (2010). Employment outcomes among individuals with visual impairments: The role of client satisfaction and acceptance of vision loss. *Journal of Applied Rehabilitation Counseling, 41*(3) 3-8.
- Joeckel, S. (2006). A Christian approach to disability studies: A prolegomenon. *Christian Scholar's Review, 35*(3), 323-344.
- Kaye, J., & Raghavan, S. K. (2002). Spirituality in disability and illness. *Journal of Religion and Health, 41*(3), 231-242.
- Kielhofner, G. (1977). Temporal adaptation: A conceptual framework for occupational therapy. *American Journal of Occupational Therapy, 31*, 235-242.
- Kozak, D. (2001). Faith eases chronic pain. *Prevention, 53*(10), 50.
- Krause, J. S., & Sternberg, M. (1997). Aging and adjustment after spinal cord injury: The roles of chronologic age, time since injury, and environmental change. *Rehabilitation Psychology, 42*(4), 287-302. doi: 0.1037/0090-5550.42.4.287
- Lens, W. (1986). Future time perspective: A cognitive-motivational conflict. In D. R. Brown & J. Veroff (Eds.), *Frontiers of motivational psychology: Essays in honor of John W. Atkinson* (pp 173-190). NY: Springer Publishing.
- Livneh, H. (2012). The concept of time in rehabilitation and psychosocial adaptation to chronic illness and disability: Part I. *Rehabilitation Counseling Bulletin, 55*(4), 195-206. doi: 10.1177/0034355212440184
- Livneh, H. (2013). The concept of time in rehabilitation and psychosocial adaptation to chronic illness and disability: Part II. *Rehabilitation Counseling Bulletin, 56*(2), 71-84. doi: 10.1177/0034355212447878
- Martz, E. (2003). Future time orientation and employment of individuals with a spinal cord injury: Does current work status reflect a greater orientation toward the future? *Work, 21*(3), 257-263.
- Martz, E. (2004). Do reactions of adaptation to disability influence the fluctuation of future time orientation among individuals with spinal cord injuries? *Re-*

- habilitation Counseling Bulletin, 47(2), 86-95. doi: 10.1177/00343552030470020301
- Martz, E., & Livneh, H. (2003). Death anxiety as a predictor of future time orientation among individuals with spinal cord injuries. *Disability & Rehabilitation*, 25(18), 1024-1032.
- Martz, E., & Livneh, H. (2007). Do posttraumatic reactions predict future time perspective among people with insulin-dependent diabetes mellitus? *Rehabilitation Counseling Bulletin*, 50(2), 87-98. doi: 10.1177/00343552070500020701
- Miles, M. (2002). Some influences of religion on attitudes toward disabilities and people with disabilities. *Journal of Religion, Disability, and Health*, 6(2-3), 117-129.
- Miller, R. B., & Brickman, S. J. (2004). A Model of Future-Oriented Motivation and Self-Regulation. *Educational Psychology Review*, 16(1), 9-33.
- Nicholls, E., Lehan, T., Plaza, S. L., Deng, X., Romero, J.L., Pizarro, J. A., Carlos Arango-Lasprilla, J. (2012). Factors influencing acceptance of disability in individuals with spinal cord injury in Neiva, Colombia, South America. *Disability and Rehabilitation*, 34(13), 1082-1088. doi: 10.3109/09638288.2011.631684
- O'Connor, A. P., Wicker, C. A., & Germino, B. B. (1990). Understanding the cancer's patient's search for meaning. *Cancer Nursing*, 13(3), 167-175.
- Oner-Ozkan, B (2007). Future time orientation and religion. *Social Behavior and Personality*, 35(1), 51-62.
- Oyama, O., & Koenig, H. G. (1998). Religious beliefs and practices in family medicine. *Archives of Family Medicine*, 7(5), 431-435.
- Paloutzian, R. F., & Ellison, C. W. (1991). Loneliness, spiritual well-being and quality of life. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 224-237). NY: Wiley.
- Reed, P. G. (1992). An emerging paradigm for the investigation of spirituality in nursing. *Research in Nursing and Health*, 15(5), 349-357. doi: 10.1002/nur.4770150505
- Rehm, R. S. (1999). Religious faith in Mexican-American families dealing with chronic childhood illness. *Journal of Nursing Scholarship*, 31, 33-38.
- Schumm, D. Y. (2010). Reimagining disability. *Journal of Feminist Studies in Religion*, 26(2), 132-137.
- Scioli, A., Samor, C. M., Campbell, T. L., Chamberlin, C. M., Lapointe, A. B., Macleod, A. R., & Mclenon, J. (1997). A prospective study of hope, optimism, and health. *Psychological Reports*, 81(3), 723-733. doi: 10.2466/pr0.1997.81.3.723
- Snyder, C. R., Lehman, K. A., Kluck, B., & Monsson, Y. (2006). Hope for rehabilitation and vice versa. *Rehabilitation Psychology*, 51(2), 89-112. doi: 10.1037/0090-5550.51.2.89
- Snyder, C. R., Sympson, S. C., Ybasco, F. C., Broders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validations of the state of hope scale. *Journal of Personality and Social Psychology*, 70(2), 321-335. doi: 10.1037/0022-3514.70.2.321
- Swinton, J. (2011). Who is the God we worship? Theologies of disability: Challenges and new Possibilities. *International Journal of Practical Theology*, 14, 273-307.
- Treloar, L. L. (2002). Disability, spiritual beliefs and the church: The experiences of adults with disabilities and family members. *Journal of Advance Nursing*, 40(5), 594-603. doi: 10.1046/j.1365-2648.2002.02417.x
- Vash, C. L., & Crewe, N. M. (2003). *Psychology of disability* (2nd ed.). NY: Springer Publishing Company.
- Wallace, B. A. (2006). *The Attention Revolution: Unlocking the Power of the Focused Mind*. Boston: Wisdom Publications.
- Yamey, G., & Greenwood, R. (2004). Religious views of the 'medical' rehabilitation model: A pilot qualitative study. *Disability and Rehabilitation*, 26(8), 455-462. doi: 10.1080/09638280410001663021
- Yong, A. (2011). Disability and the love of wisdom: De-forming, re-forming, and per-forming philosophy of religion. *Evangelical Review of Theology*, 35(2), 160-176.
- Zhang, C., Bennett, T., & Hojnar, L. (2001). Multicultural views of disability: Implications for early intervention professionals. *Infant-Toddler Intervention: The Transdisciplinary Journal*, 11(2), 143-154.