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Effects of Social Influence in Transformational Christian Worship Experiences

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THE EFFECTS OF SOCIAL INFLUENCE IN TRANSFORMATIONAL

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Abstract

There exists a severe deficit of studies exploring the psychological aspects of Christian worship experiences despite worship's importance in Christianity and in many people's lives. Transformational worship experiences can have lasting effects on one's outlook and psychological functioning (Chou, 2008; Cutler, 1976; Ellison & George, 1994; Fife, Adegoke, McCoy, & Brewer, 2011; Salsman, Brown, Brechting, & Carlson, 2005), yet very few studies have investigated these experiences. The current study sought to explore the effects of group size and style of worship on participants' feelings of deindividuation and focus on others within the congregation. Seventy-six middle aged adults from a range of ethnicities and denominations took part in an interview that included measures of religious support, social support, style of worship service, and a number of free-response questions about a transformational worship experience in the participant's past. It was predicted that a more ceremonial worship style and that higher scores in religious and social support would be associated with less focus on specific others, that a more ceremonial worship style would be associated with more religious and social support, and that, depending on the level of religious and social support, the relationship between ceremonial style and focus on other would vary. Except for a significant positive correlation between ceremonial worship style and religious support, the proposed hypotheses were not supported.

The Effects of Social Influence in Transformational Christian Worship Experiences

Worship in its many forms makes up a very important part of the Christian religion. It is a time when many people feel that they have powerful and life-changing spiritual experiences, and yet very little, if any, psychological research has been done exploring these occurrences. This study investigated the roles that social influence plays in transformational Christian worship experiences. The researcher was primarily interested in looking at the effects of group size and worship style on people's perceptions of their transformational experiences. But, due to the limitations of the archival data, information of group size was unavailable. For theoretically validated reasons (which will be covered later), the religious and social support measures in the archival data were used instead of group size because they are additional predictors of deindividuation.

Social and Religious Support

Many studies have found a positive correlation between social support and overall emotional and psychological well-being (Cohen & Wills, 1985; Eriksson et al., 2009; Kennedy, 1989). The relationship seems to be especially true for those who are going through high-stress periods. Studies have shown that social support remains a strong resource with continuing positive psychological impacts even during long periods of chronic stress (Park & Folkman, 1997), such as terminal illnesses (Carey, 1974), and for those working as expatriate humanitarian aid workers (Eriksson et al., 2009). Eriksson et al.'s (2009) study of aid workers showed significant negative correlations between two aspects of social support, emotional and organizational support, and levels of burnout. Being part of a supportive team

and developing friendships with other aid workers reduced emotional exhaustion, increased

one's sense of personal accomplishment, and increased one's feeling connection with those

whom they were serving. There is debate concerning why social support has such beneficial

effects, but one theory is that is acts as a buffer between people and the harmful effects of the

stressors that they face (Cohen & Wills, 1985; Stone et al., 2003). Social support can't

eliminate crises, but it helps protect people from negative repercussions.

Social support, as operationally defined in the existing literature, consists of many

different behavioral, emotional, and psychological facets (Barrera, 1986; Park & Folkman,

1997; Winemiller, Mitchell, Sutliff, & Cline, 1993). Winemiller, Mitchell, Sutliff, & Cline

(1993) broke social support into four separate categories: esteem support, informational

support, social companionship, and instrumental support. Esteem support is any way of

showing someone that they are accepted and esteemed, and it covers actions such as

sympathy, affection, and encouragement. Informational support is assistance in

understanding and dealing with stressful events. Social companionship is defined as how

much time one spends with others in recreational and leisure activities. Finally, the

researchers describe instrumental support as the provision of tangible aids such as needed

services, material needs, and financial aid. A slightly different take on social support is

provided by Barrera (1986), who conceptualized social support as social embeddedness,

perceived social support, and enacted support. Social embeddedness is one's sense of

community and how connected they are to others in their social groups. Enacted support is

the tangible actions people use to show support. Perceived social support is somewhat more

complicated. It is described as how confident one is that support and care would be available from the community in times of need and as one's perceived level of connectedness to others.

Most measures of social support analyze the support provided by friends, family, and spouses (Winemiller et al., 1993), but religious support focuses on the support provided by those in one's church community, including fellow congregation members and church leaders (Fiala, Bjorck, & Gorsuch, 2002; Stone et al., 2003). Church leaders, such as clergy and pastors, often provide formal support structures such as spiritual and emotional counseling for a wide variety of issues, while other lay members with whom one becomes familiar provide more informal means of support (Fiala et al., 2002). It has been shown that the social support provided by Christian groups was still a significant predictor of life satisfaction above and beyond demographic factors such as race, gender, education, or income (Cutler, 1976; Fife et al., 2011). But within Christianity itself, which denomination a person is involved in doesn't seem to have an effect on happiness -- what makes a difference is the frequency of involvement in religious services (Chou, 2008).

Many researchers have found connections between the social support provided by religious communities and people's well-being and life satisfaction (Chou, 2008; Cutler, 1976; Ellison & George, 1994; Fife, Adegoke, McCoy, & Brewer, 2011; Salsman, Brown, Brechting, & Carlson, 2005). There seems to be something about religious groups in particular that enhances social support, or the benefits of social support, more so than secular groups -- membership in church-related groups is a significantly greater predictor of life satisfaction and happiness than membership in any other type of group (Cutler, 1976). Religious groups often function as a reliable source of support within one's life because,

typically, involvement in a religious community happens regularly, continuing through times

of crisis as well as calm (Stone et al., 2003). It is also probable that friendships are more

likely to form within religious congregations than in secular contexts because religious

groups provide frequent social contact between people with the same religious beliefs and

who often share similar political and social values as well (Ellison & George, 1994). Because

of the stability created by this involvement, others within the religious community are able to

provide meaningful support in the same way that close friends and family do (Stone et al.,

2003). This simple effect is enhanced by the way in which congregations are able to foster

the development of mutually supportive ties among members that last could last for a

lifetime. Because of the shared norms on reciprocity and altruism that exist in the religious

setting, when someone provides support to a fellow congregant, they can reasonably expect

that this act will be repaid in the future (Ellison & George, 1994). This system builds up a

web of supportive relationships that socially ties together the members of a congregation.

Ellison and George (1994) found that those who attend church frequently have larger

nonkin social networks than those who attend church infrequently or never, and that this may

happen because religious involvement facilitates friendships by bringing together people of

similar values and world-views. They also found that frequent churchgoers report having

more contact, both in-person and over the phone, with nonkin and more social support in the

form of supportive transactions, both instrumental (ex: money, services, or goods) and

socioeconomic. Frequent churchgoers also outdo infrequent and non-churchgoers in their

positive perceptions of their social relationships, being more likely to report feeling valued

and cared for (Ellison & George, 1994).

This is supported by the studies that have found that religious involvement not only leads to increased social contacts (Ellison & George, 1994; Hintikka, Vinamaki, Koivumaa-Honkanen, Tanskanen, & Lehtonen, 1998), but to higher levels of social support (Ellison & George, 1994; Hayward & Elliott, 2011; Hintikka et al., 1998; Koenig et al., 1997). Not surprisingly, like social support, religious support has been shown to be positively associated with life satisfaction and positive psychological functioning, including decreased levels of depression (Bjorck & Kim, 2009; Fiala et al., 2002), and has been found to be especially beneficial during times of crisis (Carey, 1974; Stone et al., 2003). Chaison (2006) found that increased religious support led to an increased use of positive religious coping, which are beneficial ways in which people use religion to help them cope with difficult life situations.

The cohesiveness of the religious group seems to play a significant role in the positive effects of religious support. More cohesive religious groups leads to an increase in the amount of religious support received, which in turns leads to an increase in feelings of belonging and how much people feel spiritually connected with others in the group (Krause & Ellison, 2009; Krause & Wulff, 2005). It is possible that this happens because when someone provides support to another, they are doing more than just giving aid. The act of providing support also conveys messages to the receiver that they are valued and welcomed. This positive feedback increased one's sense of belonging within the congregation (Krause & Wulff, 2005). Bjorck and Kim (2009) found that for college students who participated in short-term missions work, the amount of support one felt from their missions team during the experience was a robust predictor of their life satisfaction.

Studies have explored why religious involvement and support seem to be able to provide unique resources for those involved in religious groups, above and beyond what is provided by typical social support (Fiala et al., 2002). The use of religious rituals may play an important role in the enhanced perceptions of social support in congregations by building collective trust and feelings of mutuality among members (Ellison & George, 1994). It is also possible that because most congregations meet regularly in the same building, people might develop feelings of attachment towards the building itself, which could lead to an increased sense of belonging (Krause & Wulff, 2005). Stone et al. (2003) discusses how the Christian church also has a historical significance of being a place of sanctuary and hospitality for those in crisis. It is a place that has always offered many facets of support, from emotional and spiritual counseling to providing for tangible needs (Stone et al., 2003). It is possible that this cultural knowledge subconsciously primes people to not only go to the church for support, but to feel as if they are receiving more meaningful support from the church than from other areas.

Both social and religious support has been found to be beneficial to one's psychological and emotional health in times of calm and crisis. Religious groups seem to be especially good at facilitating this support because of the bonds they foster between members and the stability they maintain. The cohesiveness of the religious group plays a role in this processes, in that more cohesiveness leads to increased religious support and increased feelings of belonging in the group.

Psychological study of religion

Feeling as if one is being supported by others in a religious community is positively related to health, self-esteem, and positive affect (Chaison, 2006; Oler, 1998; Stone et al., 2003). Social support seems to act as a buffer between stressors and poor health and other negative reactions in times of crises (Munro, 1989). There are many reasons why this phenomenon may occur. Chaison (2006) found that social and spiritual support from church members contributed to a higher use of positive religious coping styles. Participants explained that other members in the church encouraged them to rely on God and their faith during times of crisis and held them accountable to following through with these principles, in addition to providing basic moral and emotional support. These effects are probably heightened by the fact that churches are generally known as places where one can go to receive emotional, relational, and tangible support during times of crises (Stone et al., 2003).

Optimism has also been found to play a mediating role in the connection between religiosity and life satisfaction. Higher levels of religiosity lead to higher levels of optimism and feelings of social support, which in turn leads to higher levels of life satisfaction (Salsman, Brown, Brechting, & Carlson, 2005).

Religious involvement has been shown to have a powerful influence on how people deal with stress and times of crisis (Bjorck, 2007; Chaison, 2006; Janzen, 2005; Munro, 1989; Oler, 1998; Pargament, Tarakeshwar, Ellison, & Wulff, 2001; Stone, Cross, Purvis, & Young, 2003). It has been shown that there is a significant negative correlation between one's anxiety and depression levels and Christian spiritual practices, and a significant positive correlation between all three of the factors of spiritual well-being, self esteem levels and Christian spiritual practices (Janzen, 2005; Oler, 1998). Spiritual well-being is the assessment

of one's relationship with God and others, including one's sense of satisfaction and life

purpose (Janzen, 2005).

Various research has been done exploring the many different religious coping styles

that people have developed, both positive and negative (Bjorck, 2007; Chaison, 2006;

Pargament et al., 2001). Positive coping often includes cognitive strategies such as feeling

that one has a strong connection with God, seeking God's guidance and help, looking for

ways in which God can use the situation for good, or belief in a greater meaning in life.

Negative religious coping can consist of feeling as if one has a insecure relationship with

God, an ominous world-view, questioning of God's power and love, being angry at God, or

seeing events as punishment for one's sins (Bjorck, 2007; Chaison, 2006; Pargament et al.,

2001). Research has found that most religious coping is positive (Bjorck, 2007), which

presumably explains why the use of religious coping generally is associated with higher

positive affect (Pargament et al., 2001).

There are a few theories on why religious communities have such a strong power as

places of social support. Johnson and Mullins (1990) hypothesized that religious

communities create such strong bonds because they function as "moral communities," which

are social networks that foster and support relationships built around common attitudes,

values, and practices. They also found that religious communities were found to be more

likely than any other type of social group to create feelings of moral community. Feeling like

one is a part of a moral community was found to be significantly related to increased self-

esteem and feelings of meaning and purpose in life and decreased feelings of alienation and

disengagement (Johnson & Mullins, 1990). Graham and Haidt (2010) expanded upon this

idea and said that moral communities are groups built around the five moral foundations of

ingroup/loyalty, authority/respect, purity/sanctity, harm/care, and fairness/reciprocity, and

that these communities are especially effective at creating an atmosphere of ingroup

cooperation and commitment.

In summary, the existing literature clearly shows that religion affects people's mental

well-being, and the trend is that religious involvement and belief is generally beneficial to

one's mental health and life satisfaction. The support received by others within the religious

community seems to pay a large part in this relationship. Religious involvement provides

increased and qualitatively different support that other organizations, which leads to

increased levels of well-being and positive coping strategies. Optimism and the affects of

religious groups as moral communities also seem to play a role in the discussed effects.

Styles of Christian Worship

Adams (1983) defines Christian worship as "the corporate act of offering response to

God, empowered by the Holy Spirit in participation with Jesus Christ, both priest and victim,

in his body, the Church; an activity descriptive of the whole assembly of Christian people,

acted out together with and through representatives" (p 9). In other words, it is the way in

which Christians respond to God as a group and on behalf of the whole group (because some

forms of worship are not carried out by everyone within the group).

Corporate worship (worship that is done in groups, usually at church) can be broken

into two broad categories -- ceremonial and enthusiastic. Ceremonial worship is best

represented by traditional worship styles that are characterized by rituals aimed at uniting

those present in a shared experience (Cohen & Hill, 2007; Dawn, 1997; Longhurst, 1993).

Enthusiastic worship is often closely related with the charismatic movement (Chou, 2008),

eschewing ritualistic actions and adopting modern musical styles and a more informal style

(Chaves & Anderson, 2008; Goh, 2008). Unsurprisingly, many people have chosen sides and

have strong opinions on which worship style is better. Critics of the more traditional,

ceremonial style accuse it of being rigid, droning, and stale, while praising the contemporary,

enthusiastic style as ushering in the Holy Spirit (Boonstra, 1998). By contrast, critics of the

enthusiastic style claim that it is non-intellectual, too repetitive, and shallow (Boonstra,

1998).

　　　　The denominations in which ceremonial style worship is most popular are Roman

Catholic, Lutheran, Episcopalian, and Eastern Orthodox (Chaves, 2004). This worship style

is highly structured, makes use of formalized roles, and originated in ceremonies performed

in the temples in the Old Testament (Longhurst, 1993). Ceremonial rituals emphasize the

social aspects of worship -- putting the focus on the communal experience, group identity,

and social cohesion (Adams, 1983; Baker, 2010; Cohen & Hill, 2007; Dawn, 1997; Turner,

1971). A traditional Catholic mass is a good example of ritualized worship -- the entire

service is highly structured and the pattern remains largely consistent over the course of

many services. Everyone, including the congregation members, have clear roles, such as

when to speak, what to say, and what movements to make at certain points (such as forming

the sign of the cross across the chest or standing). There are also many ritualistic elements to

the service, such as the Eucharist and certain prayers, that hold a greater symbolic meaning

that is not evident unless one is familiar with the religion and service.

It is advantageous for churches to encourage the performance of religious rituals. As Baker (2010) discussed, the performance of rituals creates a stronger sense of attachment to a social group, which in turn leads to members who are more committed to the group. These committed members are more likely to create a stronger positive emotional energy within the group, which is advantageous for all the members. The performance of synchronized actions also leads to increased liking, trust, self-sacrifice, and cooperation within a group (Ellison & George, 1994; Wiltermuth & Heath, 2009, as cited in Graham & Haidt, 2010). Many rituals create a shared sense of empathy within a group, calling upon "what if" scenarios or remembering times of hardship that have been overcome, such as the Jewish celebration of Passover or the Christian Eucharist (Adams, 1983; Seligman, 2009). Religious rituals can also act as a way of keeping alive a group's history by reliving events of the past (Adams, 1983).

Religious rituals act as a form of social cohesion not just because of these positive emotional effects. Turner (1971) found that rituals often act as norms for behavior within a group. Those who deviate from these religious norms may be socially ostracized by being seen as immoral, blasphemous, dangerous, or indecent (Turner, 1971). In this sense, religious rituals use both positive reinforcers and punishment to encourage group commitment and conformity -- increased positive emotion when more members are committed and the threat of social consequences for the lack of ritual compliance.

The enthusiastic worship style is a more modern approach to worship that has gained substantial popularity within the past two decades (Chaves & Anderson, 2008), primarily among Protestant denominations (Chaves, 2004; Chaves & Anderson, 2008; Cohen & Hill,

2007). This more informal style of worship is more common among churches with younger

congregation members (Baker, 2010; Goh, 2008; "Survey: Religion more diverse, worship

more contemporary," 2001). Musically, the enthusiastic worship style is characterized by an

increased use of modern musical styles and instruments. This commonly includes the use of

drums and other percussion instruments and electric instruments such as keyboards and

electric guitars (Chaves & Anderson, 2008; Goh, 2008; "Survey: Religion more diverse,

worship more contemporary," 2001). This is often also accompanied by an increased use of

media and visual projection equipment (Chaves & Anderson 2008; Goh, 2008).

In contrast to the rituals and community focus of the ceremonial style, the

enthusiastic style focuses on the individual's personal experience with God (Cohen & Hill,

2007; Dawn, 1997; Goh, 2008; Longhurst, 1993), but is still done in a congregational group

setting. The focus of these services are on each individual's own personal growth and

relationship with God (Cohen & Hill, 2007; Dawn, 1997), and ritual is thought to get in the

way of having an authentic relationship and is thus marginalized (Goh, 2008). This change in

worship style reflects a change that many churches have made in how they view God. The

focus has shifted from God as being a judgmental deity and has been superseded by the more

intimate idea of the personhood of Jesus ("Survey: Religion more diverse, worship more

contemporary," 2001). Enthusiastic worship allows and expects the worshipers to act

spontaneously and passionately, moving however they feel led to move by God. These

actions commonly take the forms of people raising their hands, dancing, or shouting during

worship (Chaves & Anderson, 2008). Instead of it being a time of communal expression,

enthusiastic worship expects each individual to view worship as a time of personal testimony

to express the work of God in their lives, despite the fact that it is still done in a group setting (Longhurst, 1993). Ritual, which acts as a binding force in communal worship, is replaced by an emphasis on sincerity. Worshipers are expected to act not because of social conventions and norms, but because internal conviction genuinely moves them to action (Seligman, 2009).

All in all, the primary theoretical concept that distinguishes ceremonial from enthusiastic worship is the differing view towards the group vs. the individual in worship. Proponents of the enthusiastic style believe that corporate worship exists as a way for individuals to connect with God on a personal level. In contrast, the ceremonial worship style, with its abundant use of rituals, focused on using worship as a way to unite the congregation through a shared spiritual experience.

Emotion and Transformation

Transformational worship experiences are defined as times during a worship service that cause meaningful and long-lasting changes in one's views and/or personality (Cohen, Gruber, & Keltner, 2010). There has been little psychological research done exploring times of transformational religious experiences (excluding conversion, which is not investigated in the current study), but what has been done has defined transformational experiences in terms of episodes in which one feels strong emotions relating to a religious or spiritual topic (Azari & Birnbacher, 2004; Cohen et al., 2010; Emmons, 2005; Guevara, 2008).

Psychology has yet to adequately understand emotion and its components, and there are many theories concerning what emotion is and how it functions. There are two

contrasting views of emotions -- feeling/somatic vs. cognitive (Azari & Birnbacher, 2004). The feeling/somatic view holds that emotions have a purely noncognitive core made up of automatic responses to arousal, and that cognitive elements are secondary. In contrast, the cognitive theories state that the important parts of emotions are the elements of cognitive processing that evaluate the situation. One theory that falls under the cognitive viewpoint is attribution theory. According to Azari's and Birnbacher's (2004) theory, emotions are caused by an initial arousal response followed closely by the cognitive creation of a belief about what caused the arousal. So while arousal is necessary, the emotion itself is specified by the cognitive element.

This is supported by earlier work by Schachter and Singer (1962), who developed a very similar theory. In their study participants were injected with a drug that caused arousal such as one would feel naturally in an emotional situation. Some participants were told about the effects of the drug, while others were given either no information about the effects or wrong information. They were then placed in what they were told was a waiting room with a confederate who acted in either a euphoric or angry. Participants who had not been correctly informed of the effects of the drug were much more likely to mimic the confederates mood in behavioral and self-report measures than those who knew that their arousal was caused by the injection. This supports the theory that when one is aroused, they try to find an explanation for their arousal, which may sometimes lead to misattribution. Those who were correctly informed of the drug's effects correctly used that as an explanation for their arousal, while those who were misinformed/not informed assumed that their arousal was being caused by an emotional response to the confederate (Schachter & Singer, 1962).

Psychologists often discuss religion and religious experiences in terms of the emotions produced (Argyle, 2002; Azari & Birnbacher, 2004; Emmons, 2005). Religion often encourages the experience of certain emotions through prescribed behaviors and beliefs (Emmons, 2005; Kim-Prieto & Diener, 2009). Christianity places a high value on strong positive emotions such as happiness, love and gratitude (Kim-Prieto & Diener, 2009), a precedent which was set in the very early stages of the religion. In the Hebrew Bible there are many examples of emotional power, and there seems to be an association between early Israelite prophecy and deliberately stimulated strong emotional responses which were mostly positive (Watts, 1996). Religion also influences emotions by affecting the meaningfulness of events. If people perceive a divine influence, these events will become more meaningful and therefore create stronger emotions (Emmons, 2005).

Research has shown that emotional responses, especially positive ones, can have a lasting impact on a person's emotional well-being and outlook on life (Emmons, 2005; Fredrickson, 2001; Fredrickson & Branigan, 2005; Hill & Hood, 1999). One of the most prominent theories in this area is the broaden-and-build theory, which states that while positive emotions may be short-lived, they provide long-term benefits by broadening people's though-action repertoires -- increasing creative and integrative capacity and strengthening personal and social resources such as resilience, optimism, and social support (Emmons, 2005; Fredrickson, 2001; Fredrickson & Branigan, 2005). While negative emotions do narrow people's momentary though-action repertoires, this effect does seem to be negated by any following positive emotions (Fredrickson, 2001; Fredrickson & Branigan, 2005). This may help explain why involvement in Christian groups has been seen to cause

lasting positive psychological effects, more so than involvement in secular groups.

Christianity emphasizes positive emotions, which, according to the broaden-and-build theory,

leads to a broadening of thought-action repertoires and increased social support and

optimism, both of which have been shown to be connected with increased psychological

well-being and life-satisfaction (Chou, 2008; Cutler, 1976; Ellison & George, 1994; Fife,

Adegoke, McCoy, & Brewer, 2011; Salsman, Brown, Brechting, & Carlson, 2005).

        In Christian beliefs and culture, negative emotions are often indirectly seen in a

positive light. They are seen as having a functional value, such as righteous anger, suffering

for God's kingdom, or disgust at immoral actions (Watts, 1996). In this way, Christian

context often takes negative emotions and masks them or transforms them into positive

emotions, thus allowing people to gain the thought-actions repertoire benefits of positive

emotions. For example, while anger is generally thought to be a negative emotion, in

Christian contexts it is often purposely manipulated into a positive -- it can lead to increased

self-knowledge (why something made you angry) and restored relationships (reconciliation

of issues that caused anger) (Watts, 1996). According to the broaden-and-build theory, this

morphing of negative emotions into positive ones negates the temporary negative effects

caused by the negative emotional state and replaces them with the benefits caused by positive

emotions such as optimism and resilience. Supporting this idea, Cohen, Gruber, and Keltner

(2010) explored spiritual transformations and found that while these transformations often

involved negative emotions, they very rarely led to lasting negative emotional consequences.

Spiritual transformations did produce long-lasting changes, but it was almost entirely

positive, such as religious strengthening, increased connection to God, changed sense of purpose, and increased positive feelings about religion.

It is clear from the existing literature that emotions play a large role in how people perceive and give meaning to religious experiences. Emotion seems to be one of the key elements that makes a worship experience transformational because it gives the event meaning and, according to the broaden-and-build theory, is what leads to the lasting changes in outlook and personality.

Group Influence on Identity and Actions

It is common knowledge in psychology that being in the presence of others can affect a persons' behaviors and beliefs. Many early studies in social influence confirmed this, including Allport's (1920) experiments. Allport found that the large majority of particpants came up with more words on a word free-association test when there were other people around them working on the same task. Participants in the group condition also came up with proportionately more words related to things in their surroundings, compared to words with personal connotations. Words that had no obvious connection to the stimulus word were also more frequent in the group condition. Allport found similar results on a test that had participants think of as many points to disprove a given argument as they could -- those in the group condition came up with more ideas than those who were alone. There seems to be something about just being in the presence of others performing the same actions as oneself that increases cognitive capacities.

Being a part of a social group can also have a large influence on how a person

constructs their identity (Berger & Heath, 2008; Blanton & Christie, 2003; Postmes, Spears,

Lee, & Novak, 2005). Postmes, Spears, Lee, and Novak (2005) discussed two primary ways

in which identities are formed within groups. In deductive groups, identity is formed around

common ideas around which the group operates. Inductive groups emphasize interpersonal

relationships, and thus identities are formed around each person's contributions and roles in

the group. These differences in group characteristics have an effect on how social influence

works within a group, such as the power of norms and relational pressures (Postmes et al.,

2005). As discussed earlier, moral communities, such as most religious communities, are

groups built around common values and ideals (Graham & Haidt, 2010; Johnson & Mullins,

1990), which would put them in the category of deductive groups.

People also use group norms to identify themselves in terms of who they aren't. If

people wish to socially separate themselves from the group identity of a group that they are

not a part of, they often purposefully diverge from actions that are associated with that group.

This can include actions as seemingly mundane as wearing a colored wristband or getting a

flu shot (Berger & Heath, 2008; Blanton & Christie, 2003). This avoidance is not indicative

of a dislike of members of the other group. Berger and Heath (2008) showed that students

who avoided wearing the colored wristbands that had come to be identified by a different

group on campus reported no dislike of the students of this group, but the students of a

different group were rated as being dissimilar from the participant and those in the

participant's own group. The hypothesis that these avoidances are fueled by a desire to create

a certain social identity is supported by research that shows that people are much more likely

to display divergent actions when in public situations. When in private, no, or very little, divergence was seen (Berger & Heath, 2008).

Being in the presence of others brings with it multiple levels of psychological effects. Not only has it been shown to subconsciously affect cognition in areas such as speed and creativity (Allport, 1920), but it plays a role in areas as important as how we construct our identities (Berger & Heath, 2008; Blanton & Christie, 2003; Postmes, Spears, Lee, & Novak, 2005). Because the choice of which groups we identify with has so much power over our social and personal identities, people will make efforts to use group norms to either identify themselves with or distance themselves from specific social groups. This effect can be seen in religious communities, which are very often created around a shared set of values and ideals used to define and set apart the group and its members.

Influence of Group Size, Deindividuation, and Relevance Theory

Much research has shown that the size of a group has effects on issues of social influence for those in the group. The larger the group, the more likely people are to conform to group norns and feel less self-aware and self-conscious (Bond, 2005; Diener, Lusk, DeFour, & Flax,1980; Jorgenson & Dukes, 1976; Levine, Cassidy, & Jentzsch, 2010; Mullen, 1984; Nordhom, 1975). While some observational data have been collected looking at these effects in large crowds (Diener et al., 1980), there is an extreme shortage of experimental data looking at social influence in large groups. Very few experimental studies use groups larger than six people, and the average seems to be closer to four or five (Bond, 2005; Diener et al., 1980; Jorgenson & Dukes, 1976; Nordholm, 1975).

While there is nothing wrong with exploring small-group dynamics, it is potentially

less relevant in terms of this study, which will be exploring social influences in much larger

groups. The median Christian congregation in the United States has 75 regular attendees, but

the average person is in a congregation of 400 (Chaves, 2004). This difference reflects the

fact that in recent years megachurches, with congregations of over 2000 weekly attendees,

have become increasingly popular (Goh, 2008). Obviously, the sizes of the groups dealt with

in this study are drastically larger than what is typically studied in terms of social influence.

The process by which group immersion causes a person's attention to be drawn away

from oneself and towards the group as a whole is known as deindividuation. This typically

leads to a greater conformity to group norms and group identity, less consideration of long-

term consequences, and more reactivity to short-term emotions, motives, and stimuli (Diener

et al., 1980; Levine et al., 2010). This effect, whether labeled as deindividuation or not, is

seen in many studies exploring effects of the group on individual actions. In Allport's (1920)

word free-association test discussed earlier, the fact that participants wrote down

proportionately more words relating to the surrounding than words with personal associations

in the group condition versus the alone condition points to the idea that there is something

about being in a group, even one that isn't interacting with one another, that causes people to

shift their focus away from themselves and towards their surroundings.

Deindividuation theory also suggests that only certain group characteristics will

create this effect of drawing members' attention away from themselves and toward the group,

creating the lack of self-awareness (Diener et al., 1980). In Postmes's (2005) study, members

in deductive groups, who create group identity through the use of norms and common ideas,

are much more likely to become deindividuated and to conform to social pressures when in this depersonalized state. For those in inductive groups, where group identity is formed through each member's contribution to the group, they are more likely to conform to pressures of social influence when their individuality was highlighted than when they were depersonalized.

Because, as discussed earlier, most religious groups are deductive, this would imply that social influence would be most effective in these groups when the members feel depersonalized and are less self-attentive. These effects of deindividuation can be seen in church members' levels of participation in the group in relation to the size of the congregation. As the size of the congregation increases, church members become less likely to participate in the group above and beyond attending services (Mullen, 1984). Examples of additional participation would including serving in the nursery, being a part of a prayer team, or volunteering to cook for a event. It is inferred that this is due to the fact that as the congregation gets larger, people become more deindividuated and less self-attentive (Mullen, 1984). Because they are focused less on the self, they are less likely to feel self-conscious and to feel individualized pressure to take responsibility, and more likely to blend in to the group as a whole. It is likely that this effect would be less pronounced in churches that feature a highly enthusiastic worship style because enthusiastic worship features an increased focus on the self and is more individualistic.

Blending this idea of outward focus in group settings and the religious rituals discussed earlier, relevance theory sheds light on the way in which social signals hold implied meanings beyond there immediate implications. As Wilson and Sperber (2008)

discuss, many utterances or actions mean more to us than what is literally communicated --

these action have acquired meanings and implications that would be imperceptible to those

who had not learned these social cues. Religious rituals are examples of actions that hold

meanings that go far beyond their literal, superficial message. A seemingly insignificant

action can hold implications of multiple levels of spiritual connections and intentions that are

widely known by those within that religion, but completely hidden to those who hadn't been

previously exposed to the ritual. Because of the implications developed in these rituals, it is

possible for them to impart meanings and cognitions to the congregation members

independently of the influence of those leading the service.

Their deductive group nature, use of rituals, and large size seem to make religious

congregations an ideal place for deindividuation to develop. In the context of Christian

congregations, the effects of deindividuation are often seen in member participation and

conformity to group norms and ritual-based cues.

Deindividuation and Religious and Social Support

As discussed previously, the more someone feels supported within their religious

congregation, the more likely they are to feel a sense of belonging and integration with the

group (Krause & Ellison, 2009; Krause & Wulff, 2005). Similar results have been found in

studies looking at secular groups -- there seems to be a significant relationship between

receiving social support and feeling more integrated with the group, perceiving more group

benefits, and being more satisfied with the group (Kennedy, 1989; Maton, 1988).

Based on the research presented above exploring religious and social support and deindividuation, the current researcher proposes that increased social and religious support leads to an heightened sense of integration within a particular group, in this case a Christian congregation, and that increased integration would lead to a decreased focus on the self during communal worship experiences and an increased awareness of the group as a whole, otherwise known as deindividuation. Therefore, increasing the religious and social support received by an individual within the group will lead to an increased sense of deindividuation. As discussed earlier, deindividuation seems to be positively related to group size and would have an impact on the degree which individuals would focus on specific others during transformational worship experiences. Because deindividuation was the main effect of group size that the current researcher sought to explore, and because social and religious support have also been linked to deindividuation, social and religious support can be justifiably used as an alternative predictor of deindividuation instead of group size.

Current Study

The current study explores the way in which deindividuation and group-cohesion affect the degree to which people focus on individual others during a transformational Christian worship experiences. Questionnaires and interviews were administered in order to collect information of religious and social support, style of worship service that the participant attends, and the amount that the participants focused of specific others during a transformational worship experience. While deindividuation has previously been studied as how much one focuses on the self, the inference can be made that, when in the context of

cohesive groups such as religious congregations, deindividuation will also lead to a decreased focus on specific individuals within the group. Instead, the focus will be more prominently on the energy and feeling of the group as a whole.

The current study has multiple hypotheses that cover a wide range of interactions between ceremonial worship style, religious and social support, and focus on others during a transformation worship experience. First, it is proposed that because ceremonial worship includes a greater usage of rituals that promote group unity and community experience, a more ceremonial worship style will be associated with less specific focus on others. Secondly, due to the connection between social and religious support and deindividuation, higher scores on religious and social support will be associated with less focus on specific individuals. Also, because the ceremonial style causes a increased sense of group unity, which has been shown to lead to receiving more support (Krause & Ellison, 2009), a more ceremonial worship style will be associated with more religious and social support. Finally, it is proposed that, depending on the level of religious and social support, the relationship between ceremonial style and focus on other will vary.

Method

For this project the current researcher will be using data that have already been collected by Dr. Abernethy and her team at the Fuller Graduate School of Psychology in Pasadena, California. The research explored participants' experiences in real worship situations, including a time of struggle, a time of feeling close to God, and a time of transformation. Participants were asked to explain these experiences, and physiological data

SOCIAL INFLUENCE IN WORSHIP EXPERIENCES

was collected. The research also included questionnaires on religious and social support, style of worship, religious strain, faith maturity, and other topics. The resulting data set from this research have been used in many different studies (e.g., Guevara, 2008), including the current one.

Sample

The 74 adult participants examined in the current study were African American (*N*=17, 22.37%), Caucasian (*N*=18, 23.68%), Latino (*N*=15, 19.74%), and Korean (*N*=24, 31.58%) parishioners from 20 Southern California Pentecostal and Presbyterian churches (Guevara, 2008). The churches that the participants attended were predominantly African American, Caucasian, Latino, or Korean, respectively. This means that participants attended churches that consisted primarily of others from their same racial background. Participants were told that they would be given $100 to share about their worship experiences in a two-hour interview. Fliers and church announcements were used to recruit participants. Participants were given $100 upon completion, and those who had to end the interview early were given $50 (Guevara, 2008).

The participants ranged in age from 35-55, with a mean age of 45 years (*SD* = 6.04). The sample was 77% employed, 66% married, and 70% women. Thirty-five percent had some college education, and 31% had a bachelor's degree (Guevara, 2008).

Measures

Because changes in meaning caused by linguistic differences and translation issues could confound the data, all measures were translated from English into Spanish and Korean and then back into English to ensure consistency across languages and internal validity. A wide range of information was collected through questionnaires, including information on demographic variables, religious and social support, religious strain, and the worship services that they usually attend. Physiological data was also collected. Much of these data have been analyzed for other studies (e.g., Guevara, 2008) and other work in progress, but was not used in the current research.

The only information that was used from the collected data listed above were questionnaires about the worship elements present in the participant's attended church service, levels of social support received, and levels of religious support received. The worship-styles scale included elements such as printed order of service, clapping, communion, guitar, use of images/video, and reading of scripture. For this scale, participants ranked each of the 39 elements presented in terms of how often they occurred, with the options being *never*, *occasionally*, or *frequently*. This questionnaire was used to determine the style of worship in the participant's church, as each of the elements had been previously determined by the Dr. Abernethy and her team to be representative of either the enthusiastic or ceremonial style. There was one element, bowing/kneeling down, that was not used because it wasn't categorized as being part of either style. There were 21 ceremony elements and 17 enthusiastic elements. Each question on the worship style questionnaire was answered on a 0-2 scale, where 0 means that the given element was never used, 1 means that is was sometimes used, and 2 means that it was used frequently. All scores from the questions that

were previously coded as being representative of the ceremonial worship style were added together to form a scale of how ceremonial the participant's attended worship service was.

Both social and religious support were measures in this study. Social support was measured using seven items that quantified support satisfaction from the Duke Social Support Inventory (Landerman, George, Campbell, & Blazer, 1989). For each of the questions (e.g., When you are talking to your close family and friends, do you feel listened to?), participants had to choose from the options *hardly ever*, *some of the time*, *most of the time*, or *not applicable*. For the purposes of this study, answers of *not applicable* were recoded as missing data. Religious support was measured by 14 questions that inquired about participants' perceptions of the support that they received from church leaders and other members of their church (e.g., If something went wrong, others in my congregation would give me assistance.). These questions were taken from the Congregational Support and Church Leader Support subscales of the Religious Support Scale (Fiala, Bjorck, & Gorsuch, 2002) and were answered on a 5-point scale ranging from *strongly disagree* to *strongly agree*.

Oral interviews, which were recorded on tape and then transcribed, were also conducted in which participants were asked questions about four types of previous worship experiences: sustaining, close to God, struggle, and transformation. For the sustaining experience, participants were to reflect on how their worship experiences have affected their daily lives. The struggle question asked participants to reflect on a worship experience during which they felt that they were wrestling or struggling while worshipping. In the close to God section, participants were supposed to reflect on a time when they felt close to God while worshipping. The final question was about a transformational experience and asked

participants to reflect on a time in worship that changed them and made a difference in their

life. For each question the participant were instructed to think of a worship experience that

happened in a church service and that was not a conversion experience.

The primary questions were:

"Apart from a conversion experience, I would like you to reflect on [a worship experience that changed you and made a difference in your life] while worshipping at a church service. [Please choose an experience that deeply affected you as we will be asking a number of questions about it.] Remember this moment when you [experienced this transformation] as if it was actually happening right now. Let me know when you are ready to begin reflecting on this experience….We will be silent for 1 minute as you actively imagine the thoughts, feelings, and physical responses you had during this experience."

The part within the brackets was changed for each of the four types of experiences. For each

one the participants filled out a short questionnaire about how they felt during the experience,

including how happy they were, how in control they felt, and how they felt towards God.

There were eight of these questions, and each was answered on a 5-point Likert scale. For the

transformation experience section a number of additional questions were asked of the

participant about what has going on in the service, what they experienced, and what

happened after the experience. The answers to the initial and additional transformation

questions were used for this study.

Procedure

Fliers and church announcements were used to recruit participants. The interviewer

was of the same ethnicity of the participant and followed a 20-page protocol that ensured

standardization and accuracy by outlining every step of the procedure. Interviewers went

through at least 20 hours of training to prepare for administering the study.

When the participants arrived at the interview site, they first completed an informed

consent form, after which they were given the demographic and other questionnaires. After

they had completed these questionnaires, the interviewer attached the physiological

equipment and started the audio recording, which ran for the duration of the interview. For

the interview the participant was asked to think about each of four specific times during a

church service. Every participant discussed and completed questionnaires about each of the

four worship experiences in the same order. Participants were asked to share their

experiences and valence and arousal ratings were administered. Physiological measures were

conducted throughout the interview.

After the interview was complete, there was a debriefing period and participants were

given access to referrals for psychological assistance and compensated (Guevara, 2008).

Linguistic Analyses

Qualitative analyses of the participant's responses regarding their transformational

experience was done using Linguistic Inquiry Word Count (LIWC). This computer program

counts words and then places them into predetermined categories, thereby giving a

standardized, quantitative way of describing a narrative by its content. The current researcher

used the previously coded categories of *art-leaders*, *preach-art-leaders*, *artist*, *church leader*,

other rel, and *family rel* to measure the frequency of words referring directly to another

person. The frequency of third-person pronoun usage was also desired, but because that

specific category was not available, *Othref* was used, which measured the first-person plural,

second-person, and third person pronouns. All of these LIWC categories were combined into

a single score by simply adding them all together. This combined score was used to measure how much participants focused on specific others during their transformational experience.

Results

The descriptive statistics for the variables of age, race, gender, marital status, education level, denomination, religious support, social support, ceremonial worship style, and focus on others are given in Table 1 and 2. Participants were generally high on religious support (M=56.43) and social support (M=19.09), and more moderate on ceremonial worship style (M=29.82) and focus on others (M=15.29).

A series of univariate analyses of variance (ANOVAs) were conducted to test whether demographic variables significantly predicted religious support, social support, and focus on others. There were no significant predictors for religious support. The univariate ANOVA for social support showed that marital status was a significant predictor (F(5, 53)=6.060, p=. 004). (The significance level for all tests in this study was set at α=.05.) Post hoc tests could not be run because two of the groups in marital status had less than two cases, but a oneway ANOVA was run to further explore the effect. As expected, marital status was found to have a significant effect on social support (F(5, 53)=3.147, p=.015). Once again, post hocs could not be run, but by looking at the descriptives (see Table 3) it is evident that those who were widowed scored much higher on social support that those who were living together but not married. But the fact that there were only one participant in each of these groups makes it difficult to generalize the results.

Another univariate ANOVA was run for focus on other and education was found to be a significant predictor (F(5, 64)=5.252, p=.004). A oneway ANOVA for focus on others and education level was run and found that there was a significant effect of education level on focus on others (F(5, 64)=3.776, p=.005). (See Table 4 for descriptives.) A Tukey HSD post hoc test showed a significant difference between *Less Than 9 Years* and *High School Graduate* (ΔM=19.373, p=.013). Three other group differences almost reached significance: *Less Than 9 Years* and *Bachelors Degree* (ΔM=15.096, p=.051), *Less Than 9 Years* and *Graduate Degree* (ΔM=15.648, p=.067), and *Some High School* and *High School Graduate* (ΔM=14.763, p=.055).

Regressions were run to test the first two hypotheses and the second half of the third hypothesis. A regression exploring whether ceremonial worship style predicted focus on others was run to test hypothesis 1. The results of ceremonial worship style's effect on focus on others when education level was controlled came out to be insignificant (b=-.037, t(67)=-.311, p=.757). But ceremonial worship style did explain an almost significant part of the variance of focus on others (R^2=.083, F(2, 67)=3.015, p=.056). For hypothesis 2, two regressions were run, one for social support and one for religious support. Social support was not found to significantly predict focus on others when education level was controlled for (b=.243, t(53)=1.830, p=.073), but the trend showed the increased social support was associated with increased focus on others. Social support also did not explain a significant part of the variance (R^2=.066, F(2, 53)=1.858, p=.166). A significant result was found for the second half of hypothesis two, but in the opposite direction of what was predicted. When education level was controlled, increased religious support was associated with increased

focus on others (b=.236, $t(67)$=2.060, p=.043). Religious support also explained a significant

part of the variance of focus on others (R^2=.136, $F(2, 67)$=5.272, p=.007).

The first half of hypothesis three was tested using a simple Pearson correlation

between ceremonial worship style and religious support, which came out to be significant

($r(72)$=.281, p=.015). The second half was tested using a regression to see whether

ceremonial worship style predicted social support when marital status was controlled. The

results came out insignificant (b=.135, $t(56)$=1.020, p=.312). Ceremonial worship style also

did not explain a significant part of the variance (R^2=.047, $F(2, 56)$=1.393, p=.257).

Two multiple regression tests were run to test the final hypothesis, with ceremonial

worship as the independent variable, religious (and then social) support as the moderator, and

focus on others as the dependent variable. When education level was controlled, the

interaction effect between ceremonial worship style and religious support did not

significantly predict focus on others ($F(2, 67)$=9.167, p=.255). Similar insignificant results

were found for the second multiple regression -- the interaction effect between ceremonial

worship style and social support did not significantly predict focus on others when education

level was controlled for ($F(2, 53)$=.934, p=.552).

Correlational analyses were run in order to discover other possible relationships

between dependent variables and education level (Table 5; see Table 6 for significance

levels). Education level was significantly negatively correlated with focus on others ($r(68)$=-.

285, p=.017), and religious support and social support were significantly positively correlated

($r(57)$=.374, p=.004). As fitting with the results reported above, religious support was

significantly positively correlated with ceremonial worship style ($r(72)$=.281, p=.015) and

focus on others ($r(68)=.268$, $p=.025$). Also, the positive correlation between social support

and focus on others came close to significance ($r(54)=.240$, $p=.075$).

The researcher then computed the means and standard deviations of religious support,

social support, and ceremonial worship style (due to an issue with the data, focus on others

was not able to be used) for each of the possible answers for gender, race, marital status,

education level, and denomination (Table 7). For religious support, the means stay fairly even

across the different demographic groups for each factor except marital status and

denomination. Within marital status, the participants who was living with their partner but

not married had a much lower score than the participant who was widowed ($\Delta M=-25$). But

these happened to be the two groups within martial status that only had one participant per

group, which makes it difficult to generalize this finding. *Baptist* and *Other* differed widely

for denominational groups ($\Delta M=13.5$), but, once again, there were very few participants in

each group -- one for *Baptist* and two for *Other.*

As was already predicted by the ANOVAs run for social support, marital status was

the only factor for which social support different dramatically. Interestingly, it follows the

same pattern as was found for religious support -- the widowed participant scored much

higher than the participant who was cohabitating without being married ($\Delta M=7$). For

ceremonial worship style, all the scores across factors stayed fairly even except for, once

again, the participant who answered *Living Together* for marital status, whose score was low.

Because there is only one participant in the *Living Together* group and this participant seems

to have unusually low scores for all the tested variables, it may be unwise to draw

conclusions about the larger population based on the scores for this group.

Discussion

Unfortunately, the hypotheses of this study were mostly unsupported by the results found. Hypothesis 1 was not supported -- ceremonial worship style did not predict focus on others when the effect of education level was controlled. This would imply that either a more strongly ceremonial worship style does not lead to increased deindividuation and group focus as predicted, or that the word-count analysis of participants' interviews was an inaccurate way to measure this effect.

The effect of education level on focus on others, while highly significant, does not, at first glance, seem to follow a logical pattern. Focus on others starts out very high for those with less than nine years of education, is still high for those with some high school, then drops dramatically to the lowest score for high-school graduates, rises again for those with some college, and then drops for those with bachelor or graduate degrees. Considering that the scores for *Less Than 9 Years* and *Some High School* are considerably higher than the scores for any other category, it can be gathered that those with less than a high school degree are more likely to focus on the behavior of specific others in their religious environment and less likely to focus on more amorphous factors such as overall group emotions and ideas. Also, if the dramatically lower score for *High School Graduate* is disregarded, the scores follow an approximately linear pattern in that the higher the education level achieved, the less one focuses on specific others. This would imply that more educated someone is, the more they are able to integrate deeply into a group and focus on less concrete, more amorphous concepts. But the small sample size for many of the education level groups makes it hard to validly make this generalization.

Hypothesis 2 was disproved as the results were in the opposite direction as predicted. With education level controlled for, religious support did significantly predict focus on others, but it was found that increased religious support was associated with increased focus on others, which was the opposite of what was predicted. The test for social support came close to significance and mirrored the results of religious support -- increased social support predicted increased focus on others. These results go against what was predicted based on the existing literature. Previous studies have shown that higher levels of religious and social support are associated with increased feelings of integration and belonging within the group (Kennedy, 1989; Krause & Ellison, 2009; Krause & Wulff, 2005; Maton, 1988), but the current researcher's prediction that this would lead to increased deindividuation and group focus seems to be incorrect. It is possible that higher levels of integration and feelings of belonging leads to more focus not only on the group as a whole but also on others members of the group. This would fit with the literature that has shown that has shown that people are more influenced by the behaviors and views of in-group members than out-group members (Barnum & Markovsky, 2007; Loersch, Aarts, Payne, & Jefferis, 2008; Martin, 1992). Following the pattern set by such studies, it is unsurprising that those who identify more with their religious group would focus more on others in that group.

The first half of hypothesis 3 was supported by the results -- ceremonial worship style and religious support were found to be significantly positively correlated, meaning that a more ceremonial worship style was associated with increased levels of religious support. Unfortunately, the second half of the hypothesis was not supported. When martial status was controlled for, ceremonial worship style did not predict social support. It seems logical that,

out of the two, religious support would be the one more closely related with ceremonial

worship style because those are the two factors directly related to religion. But because social

support can be provided by one's religious congregation, has been shown to be associated

with increased religious involvement (Ellison & George, 1994; Hayward & Elliott, 2011;

Hintikka et al., 1998; Koenig et al., 1997), and seems to overlap a good deal with religious

support, it is surprising that the results came out to be so insignificant. Especially as religious

and social support were found to be significantly positively correlated with each other. But

for both religious and social support there were high levels of support with relatively small

standard deviations, so there was little variance to be explained. Religious support had the

most variance out of the two, so it makes sense that the predictor was more successful at

predicting the variance of that variable.

It is possible that the predicting effect of martial status was so strong that it

overshadowed any effect caused by ceremonial worship style. While post hoc tests were

unable to produce results exploring this effect due to there only being one participant in two

of the subgroups, by looking at the subgroup means a logical pattern can be determined. The

most obvious is that those who are living together but not married have much lower scores on

social support than those who are widowed. Considering that the sample is of church-

attending Christians and that cohabitation before marriage is generally frowned upon within

Christian communities (Scott, 1995), it is not surprising that these people would feel like they

receive less support. Also, because Christian doctrine specifically teaches that people should

care for the widowed in tangible ways (James 1:27, New International Version), it is logical

that Christian widows would feel high levels of social support. Those who were single or

married and living together also had high levels of social support, which makes sense

because these are two states that are condoned by Christian doctrine (1 Corinthians 7:8, 7:34,

Hebrews 13:4, New International Version; Merrill, 1997; Scott, 1995). Thus those who are in

these states would be more likely to be supported by others within the Christian church.

Interestingly, those who are divorced also feel high levels of social support, on the same level

as those are married and living together. This is surprising because divorce is looked down

upon in many Christian denominations and even considered a sin in some (Garland, 1995;

Instone-Brewer & Becker, 2007; Olshewsky, 1979). Following this logic, one would suspect

that those who are divorced would receive less social support, and this view is supported by

previous literature (Jenkins, 2010). But this obviously was found to be untrue. Perhaps other

church members feel pity or empathy towards those who have been through divorce and thus

provide them with more social support. Or it is possible that divorcees are receiving social

support from people and organizations unrelated to the church.

As social and religious support were so closely correlated, it is interesting that marital

status only significantly affected social support. Considering the reasoning used above to

explain the connections between marital status and social support, one would expect a similar

pattern to be found for religious support. This pattern was found, but it did not come close to

significance. Perhaps this is a reflection of the measures used for religious and social support.

The questions used for social support focus more on how satisfied one was with the social

support they received, while the religious support questions covered a broader range of areas

of support, such as tangible assistance, feeling of belonging, and feeling of closeness to

leaders and congregation members. There may be something about the differences in these types of measures that caused the different results.

The final hypothesis was not supported by the results. With education level controlled, neither religious nor social support showed a significant interaction with ceremonial worship style in terms of how much participants focused on others. So the current researcher's prediction that religious and social support would affect the relationship between ceremonial worship style and focus on others seems to be incorrect according to the present data. Considering the lack of significance found between social support and ceremonial worship style and focus on others, it isn't surprising that that half of the hypothesis was not supported. The relationships discovered thus far between religious support, ceremonial worship style, and focus on others are more complex. While religious support has been found to be significantly related to ceremonial style and focus on others, the last two variables were not significantly related to one another. So while it seems that a change in religious support would affect both the other factors, evidently the relationship is not strong enough to reach significance. Either that, or religious support does affect both but in different ways, and those differences prevent there being correlations between the two variables. It is also possible that significance was not found because the scores for religious support, social support, and ceremonial worship style were all high and had relatively little variation, making it more difficult for correlations to be detected. But even if it did reach significance, it would likely be in the opposite direction as what was predicted in the current study. Increased religious support was found to be correlated with increased ceremonial worship style as predicted, but, contrary to hypothesis, increased religious support was found to be associated with increased

focus on others. Thus, if the results had been significant, it would be likely that increased

religious support would be associated with increased ceremonial worship style, which in turn

would have been associated with increased focus on others, which is contrary to predictions.

The use of archival data for the current study caused many limitations that could have

affected the outcome of the results, as the current researcher was unable to design the

experiment specifically for the purposes of the current study. The current researcher

originally sought to study the effects of group size on deindividuation, but was forced to do

differently due to the unavailability of information on congregation size. Future studies could

easily remedy this problem by gathering data on congregation size as a part of the interview.

The measures used for social and religious support had their own potential issues. The

different foci of the two scales of religious and social support could have led to some of the

difference found in the results. It is possible that the two scales were measuring aspects of

social and religious support other than what was desired for the current research. If a

replication was conducted, it would be advantageous to use two scales of religious and social

support that measured similar aspects of support with equal focus to help ensure validity.

It also may be advantageous to repeat the study with a more refined measure of

ceremonial worship style. The measure used in the archival data covered a wide range of

elements, including some factors that seem to be unconnected to one's experience during

worship or to deindividuating effects, such as there being a sermon during the service or the

presence of baptisms. These extraneous factors may have had a different pattern of answers

and therefore skewed the results of the ceremonial worship scale. Using a more refined scale

that eliminated these unnecessary elements would lead to a more accurate measurement of ceremonial worship for the purpose of this research.

The pre-existing coding of the linguistic data also could have had limiting effects. There was no category for only third-person pronouns, which was what was desired. The only category that contained these pronouns also included first-person plural and second-person pronouns. This was somewhat problematic because first-person plural nouns could be used in ways that implied higher levels of collectivism and group integration, which was the opposite of what the researcher sought to measure. But the importance of measuring third-person pronouns was great enough that, because making a new category and recoding the linguistic data was not a feasible option, the researcher chose to include the category of first-person plural, second-person, and third-person pronouns.

In addition, focus on individuals in a group context was chosen as a measure of deindividuation with admittedly little research to back up the decision. But it was a decision made by necessity, due to the limitations of the existing data. In future studies more care should be used when choosing how to measure deindividuation, which admittedly is a fairly abstract concept that is difficult to operationalize. But previous studies have developed self-report measures of deindividuation that could be modified for use in this research (Diener, 1979; Jorgenson & Dukes, 1976). It is possible that focus on others was not an internally valid way to measure deindividuation, thus skewing the entire study.

Also, if the study were to be replicated it would be advantageous to use participants from a wider age-range. The archival data only had middle-aged participants between the ages of 34 and 55. In order to make the research representative of the general population,

younger and older adults should be included in the sample. It would also be interesting to explore age differences in the predicted effects. It is possible that the differences that come with age, such as length of time involved in a church and amount of life experience, could have effects on one's perceived amount of support and focus on others. The researcher would also want to find participants whose churches featured less ceremonial worship elements, since the scores for the current sample were all fairly high, and this lack of variance could have caused some of the lack of significance found in many of the tests.

For future studies, it would be advantageous to implement the changes mentioned above in an effort for stronger internal validity. More work should also be done to explore the possible effects of various demographic variables such as denomination and race. While these variables were not found to have significant effects in the current study, it is possible that by increasing internal validity in future tests more nuanced effects will become evident. It is possible that cultural and doctrinal differences that come from these demographic factors would have an effect on support and deindividuation.

While this study only looked at the effect of ceremonial worship elements, it would be important in future studies to explore enthusiastic worship elements as well. It is possible that the interaction between the two styles, which can coexist in a single service, could lead to a better, more nuanced understanding of the effects of worship style on one's experiences during corporate worship.

The current study sought to look at many different associations between the four main variables of social support, religious support, ceremonial worship style, and focus on others. Because of the broad focus, the current researcher was unable to explore each of the many

different relationships in depth. For the sake of more complete knowledge, it would be advantageous to break apart the overall picture formed by this study in order to spend greater time and energy learning about the influences present in each of the individual relationships.

Considering the importance that worship and worship experiences have in the lives of many Christians, it is a shame that this area has received so little attention in psychological literature. Because worship is often done in the context of an entire congregation, social influence of various kinds are bound to have an influence on these experiences. Future work should be done exploring the effects of social influence in an effort to better comprehend these experiences in worship that can have lasting effects on people's lives. Not only would this give us a better scientific understanding of how people perceive spiritual experiences in the context of a large religious group, but it would be valuable information for church and worship leaders as they guide their congregations through worship.

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Table 1

Descriptive Statistics

	N	Minimum	Maximum	M	SD
Age (in years)	73	34	55	44.78	6.04
Religious Support	74	34	70	56.4331	7.98086
Social Support	59	12	21.5	19.0932	2.0792
Ceremonial Worship Style	74	16	39	29.8176	4.42717
Focus on Others	70	0	46.14	15.2953	9.12061

Table 2

Descriptive Statistics

	Frequency	Percent
Gender		
Male	22	29.7
Female	52	70.3
Race		
Other/ N/A	1	1.4
African American	17	23
Korean	24	32.4
Latino	14	18.9
Caucasian	18	24.3
Marital Status		
Single	13	17.6
Living Together	1	1.4
Married	49	66.2
Separated	2	2.7
Divorced	8	10.8
Widowed	1	1.4
Education Level		
Less Than 9 Years	3	4.1
Some High School	4	5.4
High School Grad	9	12.2
Some College	26	35.1
Bachelors Degree	23	31.1
Graduate Degree	9	12.2

	Frequency	Percent
Denomination		
Baptist	1	1.4
Non-Denominational	9	12.2
Pentecostal	31	41.9
Presbyterian	31	41.9
Other	2	2.7

Table 3

Social Support with Martial Status as the Predictor

	N	Minimum	Maximum	*M*	*SD*
Single	7	15	21.5	18.3571	2.83893
Living Together	1	14	14	14	N/A
Married	42	16	21	19.3571	1.44529
Separated	2	12	20	16	2.33809
Divorced	6	15	21	19.6667	2.33809
Widowed	1	21	21	21	N/A
Total	59	12	21.5	19.0932	2.0792

Table 4

Descriptives for a Oneway ANOVA of Focus on Others with Education Level as the Predictor

	N	Minimum	Maximum	*M*	*SD*
Less Than 9 Years	3	18.8	46.14	28.44	15.34899
Some High School	4	11.98	41.62	23.83	13.86251
High School Graduate	8	0	17.09	9.0675	7.18089
Some College	26	7.32	45.9	16.7496	8.95228
Bachelor Degree	20	0	22.78	13.3435	5.84308
Graduate Degree	9	3.55	25.73	12.7922	6.81286
Total	70	0	46.14	15.2953	9.12061

Table 5

Correlations Levels Between Variables

	Age	Education Level	Religious Support	Social Support	Ceremonial	Focus on Others
Age		-0.007	-0.146	0.044	-0.102	-0.211
Education Level			-0.099	0.021	-0.195	-0.285*
Religious Support				0.374*	0.281*	0.268*
Social Support					0.163	0.24
Ceremonial						0.027
Focus on Others						

Note. * signifies significance at the .05 level (2-tailed).

Table 6

Significance Levels of Correlations Between Variables

	Age	Education Level	Religious Support	Social Support	Ceremonial	Focus on Others
Age		0.953	0.219	0.745	0.391	0.082
Education Level			0.4	0.873	0.095	0.017*
Religious Support				0.004*	0.015*	0.025*
Social Support					0.219	0.075
Ceremonial						0.825
Focus on Others						

Note. * signifies significance at the .05 level (2-tailed).

Table 7

Means and Standard Deviations for Additional Demographics

	M			SD		
	Religious Support	Social Support	Cere-monial	Religious Support	Social Support	Cere-monial
Gender						
Male	58.8742	19.088	28.023	8.40742	1.9862	4.4574
Female	56.2465	19.095	30.577	7.87052	2.1392	4.2304
Race						
African-American	60.2941	19.818	32.471	7.15686	1.328	3.0128
Korean	53.6385	18.682	27.583	7.02187	2.457	4.6149
Latino	55.3378	18	31.167	8.00734	2.7839	3.8807
Caucasian	57.4256	19.735	29.167	8.8179	1.0326	4.2737
Marital Status						
Single	57.7562	18.357	29.154	8.50299	2.8389	4.9061
Living Together	45	14	19	N/A	N/A	N/A
Married	56.11	19.357	29.745	7.47709	1.4453	4.1485
Separated	59.5	16	34	10.6066	5.6569	2.1213
Divorced	55.2288	19.667	31.125	9.35768	2.3381	4.1641
Widowed	70	21	33	N/A	N/A	N/A
Education Level						
Less Than 9 yrs	59.6667	16.5	32	9.29157	6.364	1.7321
Some High Sch.	56.1901	20	28.375	6.32334	N/A*	3.5911
High Sch. Grad	53.388	18.667	30.444	8.6007	2.582	4.1866
Some College	59.419	19.881	31.442	7.28749	1.3408	4.4166
Bachelors Deg.	54.3766	18.81	28.326	8.53552	2.1822	4.8515
Graduate Deg.	55.4331	18.625	28.222	6.85148	1.4079	2.9907

	M			SD		
	Religious Support	Social Support	Cere-monial	Religious Support	Social Support	Cere-monial
Denomination						
Baptist	63	N/A**	32	N/A	N/A	N/A
Non-Denom.	59.7402	19.938	31.056	8.91997	1.32119	4.9777
Pentecostal	56.5209	18.909	30.484	7.49179	1.9978	4.0589
Presbyterian	55.6207	19.1111	28.855	8.22688	2.1364	4.1457
Other	49.5	17.5	27.75	6.36396	4.9498	12.374

Note. Because of an unavoidable issue in the data processing, Focus on Others was not able to be used in the analyses.

* Only one participant in the *Some High School* group completed the social support measure.

** The only Baptist participant did not complete the social support measure.