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In Search of the Psychological Antecedents and Consequences of Christian Conversion:

A Three-Year Prospective Study

C. Harry HUI[1], Sing-Hang Cheung[1], Jasmine LAM[1],

Esther Yuet Ying LAU[2,3,4], Livia Yuliawati[1], and Shu-Fai CHEUNG[4]

[1] Department of Psychology, The University of Hong Kong

[2] Department of Psychological Studies, The Hong Kong Institute of Education

[3] Centre for Psychosocial Health, The Hong Kong Institute of Education

[4] Department of Psychiatry, The University of Hong Kong

[5] Department of Psychology, University of Macau

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Corresponding author: C. Harry Hui (E-mail: huiharry@hku.hk; Phone: +852-3917-2291; Fax: +852-2858-3518; Address: Department of Psychology, 6/F, The Jockey Club Tower, Centennial Campus, The University of Hong Kong, Pokfulam Road, Hong Kong)

Abstract

Religious conversion is often an overwhelming experience. Although self-reports by some converts about life before and after conversion often contain vivid descriptions of the type and extent of changes, few rigorous empirical studies have documented them. This three-year longitudinal prospective study aimed to understand the precursors of conversion, and whether this event would result in psychological changes. A logistic regression on 455 non-Christian Chinese (of whom 46 later became Christian converts) showed that neither baseline personality, personal values, social axioms, psychological symptoms predicted whether one would be converted during the next three years. However, people who thought that there is one and only one true religion were more likely than others to be converted. We further formed a matched sample of 92 individuals who had been Christians throughout the study, and a matched sample of 92 non-believers who remained so throughout the study. Comparison between measures taken at the baseline and end of the study period showed that converted people were transformed not in personality but in symptoms of stress and anxiety, as well as several personal values.

Keywords: religious conversion; Christianity; stress; anxiety; longitudinal study

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Religious believers differ from their counterparts on a variety of psychological characteristics (see, e.g., Saroglou, 2002; Saroglou, Delpierre, & Dernelle, 2004; Smith, McCullough, & Poll, 2003). A question that naturally arises is: Are these differences the result of people becoming believers, or do these psychological characteristics make religious conversion more likely, or is the causality bidirectional? Partly because of the commonly used cross-sectional or retrospective research design, previous attempts to answer this question have not provided conclusive answers. In the following, we briefly described how religious believers and non-believers are different from each other, and derived hypotheses based on the different assumptions of causal directions between psychological characteristics and religious conversion. We then reported a prospective study that tested the hypotheses.

Correlates of Religiosity and Religious Affiliation

Religious believers and non-believers differ in their personality. Religiosity is correlated with conscientiousness (Taylor & MacDonald, 1999), emotional stability (Saroglou, 2002), and low openness to experience (Saroglou, 2002; Saroglou & Muñoz-García, 2008). People high on openness to experience would be more tolerant of ambiguity and doubting of authority, rather than be more submissive to religion (Wink, Ciciolla, Dillon, & Tracy, 2007).

Religiosity is also related to psychological symptoms and wellness. A meta-analysis of 147 studies involving 98,975 individuals showed a correlation of -.10 between religiosity and depressive symptoms (Smith et al., 2003). Another meta-analysis showed that positive religious coping is correlated with better psychological coping of stress, while negative religious coping is

negatively correlated with it (Ano & Vasconcelles, 2005). Some studies did suggest a lack of difference between the religious and the fervently atheistic in psychological health (e.g., Galen & Kloet, 2011; Hunsberger, Pratt, & Pancer, 2001; Moore & Leach, 2015). However, on balance, there is more evidence that believers are different from non-believers in many aspects of moods and symptoms.

It is intuitive to expect that religious believers and non-believers differ on values. These are desirable trans-situational goals that serve as guiding principles in a person or society. They include: achievement, benevolence, conformity, hedonism, power, security, self-direction, stimulation, tradition, and universalism (Schwartz, 1992). A meta-analysis by Saroglou et al. (2004) showed that compared to the non-religious people, Christians put more emphasis on conservation values (i.e., tradition, conformity, and security), self-transcendence values (i.e., benevolence and universalism), but less emphasis on openness-to-change values (i.e., hedonism, stimulation, and self-direction) and self-enhancement values (i.e., achievement, and power).

The last set of variables is social axioms, which are what a person holds as true about the social world (Leung & Bond, 2008). Leung and Bond (2004) defined social axioms as "generalized beliefs about people, social groups, social institutions, the physical environment, or the spiritual world as well as about categories of events and phenomena in the social world" (p. 198). They identified five such beliefs: social cynicism, social complexity, reward for application, religiosity, and fate control. Not much work has been conducted to compare the religious and the non-religious on the social axioms. The only exception is that Neto (2006) found believers who attend church and believers who do not attend church differ on the social axiom of religiosity, which is rather intuitive. Macaskill (2007) observed that the clergy were generally less cynical than both the lay believers and non-believers, who were not different from each other.

The above brief review of the literature demonstrates that religious people and non-religious people can be quite different on a variety of characteristics. What is not known, however, is whether these differences were pre-existing, before one became a believer, and thus can partially account for why some people are converted into a religion. We call this view the "selection assumption", which generally states that people with certain characteristics are attracted to and "selected" into religion more often than are others. A different theoretical position is that those differences could actually be the results of the religious conversion. We call this the "conversion effect assumption".

If the second, conversion effect assumption receives empirical support, another purpose of this paper is to add to the current understanding of changes that accompany religious conversion. Specifically, what psychological characteristics are changed and what are not changed after one has become converted?

Conversion

Whereas there are diverse conceptualizations of religious conversion, in the present paper we limit our discussion to conversion to Protestant Christianity. It is operationally defined as a change of self-reported religious affiliation, from being a non-Protestant (e.g., Buddhist, Taoist, Roman Catholic, or non-believer of any religion) to being a Protestant. This definitional approach has been adopted by Barro, Hwang, and McCleary (2010) as well as Longo and Kim-Spoon (2014). It excludes those incidents through which people become more committed to a religion they already held, or gain more insights about a belief system. Notwithstanding, there are different motifs of conversion (e.g., Lofland & Skonovd, 1981). These could range from highly emotionally charged revivals (occurring typically in big crowds) to intellectual and often

relatively calm search for alternative ideologies. Given the wide variety of conversion experience, it is not surprising that different factors may account for different types of conversion.

Researchers have investigated various factors of conversion. These include societal-level variables such as religious pluralism and government restrictions (Barro et al., 2010), contextual variables such as exposure to religious propaganda, developmental variables such as earlier attachment to care-givers (Granqvist, Mikulincer, & Shaver, 2010; Kirkpatrick, 2005), as well as internal psychological characteristics that predispose a person to undergo such a change. Our focus was in the latter, to be discussed in the next sub-section.

Psychological Antecedents of Religious Conversion

Person-religion fit. One theoretical position consistent with the selection assumption is the person-religion fit model. It is a derivative from the general theoretical approach of person-environment fit, which posits that individuals would be attracted to and remain in environments that fit with their personal characteristics. Hence, people who have certain psychological needs, attitudes, and personality may be attracted to religions or religious institutions that can meet those people's needs, affirm their attitudes, or cherish their personality traits. In a discussion of possible personality factors, Gooren (2007) mentioned "a religious worldview or an inner need to become religiously involved (prior socialization) or certain character traits inductive to religious participation (e.g., insecurity)" (p.351).

Applying the fit model, Pargament, Tyler, and Steele (1979) found that members who fit in with their respective religious institutions were different from the members who fit less well on certain psychosocial characteristics. Another study (Pargament, Johnson, Echemendia, & Silverman, 1985) showed a positive correlation between members' tolerance for ambiguity and satisfaction with aspects of the congregation, for churches that were autonomous and open to

different views, but a negative correlation for churches that were less open and autonomous. Namini, Appel, Jürgensen, and Murken (2010) showed that the fit between the adherents' psychological need and the religious groups' supply was related to satisfaction with the religious affiliation and low depression.

It is also possible, according to this perspective, that people who possess personality and value characteristics shared by a religious group are more likely to be attracted and self-selected to that group. For instance, religious beliefs that can provide "a clear, delineated value system [...] might appeal to conscientious people…" (McCullough, Poll, & Smith, 2003, p. 981). Religious worldviews held in the Christian community can meet the needs of conscientious people for structure and order in life. Such individuals are characterized by a high level of dutifulness, which makes it easy for them to adhere to Christian ethics and moral obligations. Religious conversion can also be related to the conscientious people's yearning for a better perspective on life. Ream and Savin-Williams (2005) opined that young people's religious conversion arose from religious groups' offer of new life perspectives that would help people cope. Conscientious people prefer beliefs and practices focusing on meaning of the self, goal, and order, which can be found in religion (Saroglou, 2010).

Furthermore, we expect a better fit between an individual and the social environment when the individual and all other individuals in the social environment share similar personality characteristics. Therefore, rather than looking at the fit between the religious believers' needs and the supplies offered by the religious institution, an alternative test of the person-religion fit model would be to ask whether those who are about to convert are more similar in terms of personality, social axioms, and personal values, to those people who have already converted, than to those who remain unconverted. Specifically,

H1: Non-Christians who were subsequently converted to Christianity were originally

more similar to the Christian believers, than to those who have never been converted, on

the Big Five, social axioms, and personal values.

Meaning system perspective. Religion can be viewed as comprising a system of beliefs

and meanings for people to live their daily life (Paloutzian, 2014; Park, 2005a). As a meaning

system, religion provides the epistemic framework for interpreting mundane activities in life but

more importantly also for making sense of the challenging life events such as illness, suffering,

disaster, and death. Park (2005b) stated that religion provides a meaning-making system for

people to cope with stressors in life.

That of course does not imply that everyone would have a religion. In fact, most people

are in a state of homeostasis, being at a level of meaningfulness that is adequate to keep them not

too unhappy and not too dissatisfied with life. In this state, they are unlikely to switch to a new

religion or turn to religion unless they can find in it greater meaning that have not been needed.

This change, which in itself can be uncomfortable, would often have to be preceded by a crisis

(Rambo, 1993). During this crisis stage, people doubt if their needs can be met in their current

frame of reference (which usually includes some religious or metaphysical components). These

doubts are often accompanied by moods such as depression, anxiety, and stress, sometimes

triggered by major life events. Indeed, Maselko and Buka (2008) stated that "changing levels of

religious activity may be a marker for underlying levels of psychological distress" (p.23).

Kirkpatrick (1997) found that women (although not men) with an anxious attachment style were

more likely than those with a secure or avoidant attachment style to become religiously

converted within the next four years. Zinnbauer and Pargament (1998) found that compared to

the already religious, new converts reported "more pre-conversion perceived stress, a greater

sense of personal inadequacy and limitation before the conversion, greater pre-post improvement in sense of adequacy and competence, and a greater increase in post-conversion spiritual experiences" (p.173). Eighty percent of converts into four different religions reported emotional turmoil during the period before their conversion (Ullman, 1982). Altemeyer and Hunsberger (1997) interviewed 24 persons who had no prior religious backgrounds but later converted into Christianity, and concluded that the "fear of what would happen to them" (p.195) could account for conversion in over half of the cases. Whether this recollection of pre-conversion state is reliable or subject to bias can only be answered with a more methodologically rigorous investigation. We tested the following hypothesis:

H2: Compared to the non-converts, the converts would have experienced more depressive mood, anxiety, and stress prior to the conversion.

H3: Compared to the non-converts, the converts would have experienced more significant life events before the conversion.

Adopting and committing to a religion as one's new meaning system would be easier if the person is already holding certain views that are consistent with the religion. These "pre-religion beliefs" in the existence of deity/supraphysical, the harmony between science and faith, and the veracity of the religion would provide the continuity between the person's original meaning system and the new one (Stark & Finke, 2000). We therefore hypothesized that

H4: Compared to the non-converts, the converts would have held stronger pre-religion beliefs before the conversion.

According to many writers, another condition for conversion to occur is the presence of contextual resources that enable or encourage a religious change. These resources may include friends who can provide information about a new religion, and the encouragement to try out the

new frame of reference. The presence of religiously devout family members and friends not only afford the person with opportunities of being socialized with values aligned with the faith, but also makes any prospective switch socially acceptable. Past research has demonstrated that social embeddedness in a faith community is a strong predictor of religiosity (Stroope, 2012). Immigrants in Taiwan (Chao, 2006) and Houston (Yang, 2000) who converted to Christianity had previously had strong social ties with members of a Christian church. These observations are not only consistent with the meaning system perspective, but also with the rational choice theory (Gartrell & Shannon, 1985), which states that the cost of switching into a religion would be lower for those who have friends and family members in that religion than those who do not. Moreover, on the basis of balance theory (Heider, 1958), we can likewise expect a higher likelihood of conversion to the religion a close friend holds.

> H5: Compared to the non-converts, converts would be more likely to report having had close friends who were religious, prior to the conversion.

Psychological Consequences of Religious Conversion

The word "conversion" implies change. The famous lyric "I once was lost, but now am found; was blind, but now I see" epitomizes one of the key messages of Christianity. William James (1961/1902) described conversion as the process by which "a self, hitherto divided and consciously wrong, inferior and unhappy, becomes unified and consciously right superior and happy" (p. 160). Believers give testimonies of what they were like in the past and what they have become now. Bookstores selling religious literatures are abound with books on stories and autobiographies of people who experienced conversion. Given that anecdotal evidence has its own limitation in terms of generalizability, it would therefore be valuable to supplement previous findings by assessing empirically the degree and scope of change that may happen to religious

converts. The change may be in personality, social axioms, personal values, or psychological symptoms.

Personality. Paloutzian (2014) opined that conversion would not result in much personality change. However, in a recent study, converts and their close acquaintances were asked to recall what their personality was like before conversion, and then to provide rating of their current personality. There were significant improvements in emotional stability, extraversion, agreeableness, conscientiousness, self-esteem, and meaningfulness (Halama & Lačná, 2011). The difficulty to distinguish whether these were robust changes or results of biased recall calls for a more rigorous replication.

H6: Christian conversion would be accompanied by a change in personality to become more similar to that of the Christians.

Social axioms. Of the five social axioms, religiosity and fate control are closely related to supernatural beliefs. It is fairly natural to expect the religiosity social axiom (i.e., belief that religion is good for oneself and the society, as defined by Leung & Bond, 2004) would strengthen as a result of conversion. As for fate control, which is the belief that life events are predetermined by some non-human forces and yet can be altered through certain magical means, previous research has shown that Christian believers holding this belief are more likely to stop attending church (Hui, Lau, Lam, Cheung, & Lau, 2015). This view of the metaphysical realm is very different from the teachings of most Christian denominations, which hold that individual and world events unfold according to the pre-ordained plan of a loving and sovereign God. A person's fate control belief will probably be brought in line with the Christian doctrines as the person is exposed to religious socialization. Thus we would predict these two social axioms to undergo changes as a result of conversion.

H7: Christian conversion would be accompanied by an increase in religiosity and a

decrease in fate control belief.

Values. Religious conversion implies a re-ordering of life priorities, which are reflected

in one's personal values. In line with earlier reviews on the differences between the religious and

the non-religious on values, we predicted that:

H8: People who experience Christian conversion would undergo an increase in self-

transcendence and conservation values that is much steeper than that among Christians

and non-Christians.

H9: People who experience Christian conversion would undergo a decrease in self-

enhancement and openness-to-change values that is much steeper than that among

Christians and non-Christians.

We also expect that the direction of change would be from a non-believer profile towards a

Christian or religious profile.

Psychological symptoms. Studies have shown that people with religious affiliation tend

to be lower on depressive mood, anxiety, and stress. A meta-analysis of 24 studies on

adolescents and emerging youths showed an effect size of -.11 between religiosity/spirituality

and depression (Yonker, Schnabelrauch, & DeHaan, 2012). Zinnbauer and Pargament's (1998)

convert sample reported an improvement in self-esteem compared to pre-conversion. Recently,

Schnitker, Felke, Barrett, and Emmons (2014) found that spiritual transformation predicted

subsequent intrapsychic functioning. Another study showed that over a three-year period,

university students' spirituality has temporal precedence over perceived quality of life (Lau et al.,

2015). We therefore predicted that:

H10: Compared to the non-converts, the converts would experience a greater decrease in

depressive mood, anxiety, and stress.

The Present Study

The current study addressed the several important methodological issues we described

earlier. First, we used a prospective rather than a retrospective design, thus eliminating any

possibility of participants' reconstructive recall bias. Second, to allow for comparison, our

sample included three clearly distinguishable groups, namely those people who experienced

Christian conversion during our period of study, those who remained as Christians throughout

the study, and those who remained as non-believers throughout the study. These groups were

matched on important demographics. Third, we considered a broad range of psychological

variables as potential predictors and consequences, to provide a big picture on how religious

conversion may be affected by and affect the human psyche.

Method

Data were collected as part of a larger multi-wave internet survey. Participants were

Chinese recruited through several churches and universities in Hong Kong and Macau, as well as

through paid advertisement on Facebook. Before they gave their informed consent to participate,

all were told that at the completion of each survey questionnaire, they could choose between a

lucky draw (to win a gift voucher of HK$100) or have us donate HK$20 to a charity for poverty

reduction. Using both materialistic and altruistically oriented incentives, and publicizing the

study via both conventional and social media channels, we attracted participants from a very

diverse background.

Participants reported about their religious affiliation at six waves, the first of which was

administered in 2009, and the sixth in 2012. A separate survey of a supplementary sample (to

make up for participant attrition) took place a year later, again continuing for three years, to 2013. The two samples together constituted a total of 711 individuals who provided sufficient useable data. Of the 455 individuals who did not check the box "Christianity" when asked about religious affiliation at Waves 1 and 2 (the baseline waves), 46 subsequently reported being a Christian at Wave 6 (the follow-up wave). With the exception of one individual who was previously a Roman Catholic, and another who was previously a Buddhist, none had a religion before. These individuals were labeled "converts" for the present study. For some analyses (to be described below), a "non-convert" subsample (n=92) was created by selecting from 409 participants who reported being a non-Christian throughout the six waves, They were matched to the "convert" subsample in terms of gender, age, education, and household income. A second subsample of 92 individuals who reported being a Christian throughout the six waves and who had provided complete information on the measures to be described below was similarly formed from the larger data set. A MANOVA confirmed that the three subsamples were comparable initially on all four demographic measures. In all three subsamples, 58.7% were women. The average age in these subsamples ranged from 23.57 to 24.21, with *SD* ranging from 6.81 to 7.28. Approximately, 53.5% reported a monthly household income under HK$20,000, and 30.1% over HK$30,000.

Measures

      Personality. The 50-item International Personality Item Pool Big Five Domain scale (IPIP; Goldberg et al., 2006) was used to measure extroversion, conscientiousness, agreeableness, intellect (openness to experience), and emotional stability. The Chinese translation was done by Hui, Pak, and Cheng (2009), and found to be satisfactory in reliability and validity. For the present sample, Cronbach's alphas ranged from .75 to .85.

Personal values. Schwartz Value Survey (SVS; Schwartz, 1996) was used to measure ten values: conformity, tradition, benevolence, universalism, self-direction, stimulation, hedonism, achievement, power, and security. Cronbach's alphas are .67, .35, .83, .77, .52, .66, .30, .70, .74, and .71 respectively, comparable to that reported by Schwartz and Rubel (2005).

Social axioms. The Social Axioms Scale (SAS; Leung et al., 2002) is made up of five subscales, namely social cynicism, reward for application, social complexity, fate control, and religiosity. Their Cronbach's alphas for this sample for the above were .63, .63, .48, .57, and .85 respectively.

Psychological symptoms. Participants' depressive mood, anxiety, and stress were measured with the Chinese version of the 21-item Depression Anxiety Stress Scale (DASS-21; Lovibond & Lovibond, 1995; Taouk, Lovibond, & Laube, 2001). This instrument has been widely used and validated among Hong Kong Chinese (e.g., Wong, Cheung, Chan, Ma, & Tang, 2006). The Cronbach's alpha of the scale for the current sample was .77 to .85.

Measures for personality, personal values, and social axioms were administered at Wave 1 and again at Wave 6. The DASS was administered at Wave 2 and again at Wave 6. Responses to the IPIP, SAS, and DASS were made on a 5-point scale. Responses to the SVS were made on a 9-point scale.

Religious friends. Participants indicated at Wave 1 whether their closest friends took part in religious activities (1=completely disagree; 5=completely agree).

Pre-religion beliefs. Three 4-option items were administered at Wave 1. They were binary-coded such that a "0" represents a belief inconsistent with Christian belief, and a "1"

represents the beliefs that "There is a personal God who participates in human history", "There is only one true religion", and "Science and faith are harmonious and complementary."

Results

Predictors of Religious Conversion

To identify psychological characteristics that may distinguish the non-Christians who would later become a believer from those who continued to maintain their non-religious status, we conducted a MANOVA to compare the two subsamples on the Big Five measured at Wave 1. No significant difference was found (Wilks' $\Lambda=.99$, $F(5,131)=.22$, *ns*). Other MANOVAs to compare the two subsamples on the five social axioms (Wilks' $\Lambda=.97$, $F(5,124)=.70$, *ns*), 10 values (Wilks' $\Lambda=.93$, $F(10,121)=.92$, *ns*), and psychological symptoms (Wilks' $\Lambda=.97$, $F(3,130)=.1.03$, *ns*) yielded similar null findings. Those non-Christians who subsequently became believers (the converts) and those who did not were non-distinguishable from each other on personality, social axioms, personal values, and psychological symptoms.

We also conducted a logistic regression with data from the 455 individuals who self-identified as non-Christians at Wave 1, to identify individual difference variables that would predispose a person to become converted, We entered the personality traits, personal values, and social axioms measured at Wave 1 as predictors of religious conversion. The model did not reach statistical significance, $\chi^2(24)=14.13$, *ns*, Cox & Snell $R^2=.03$.

Another logistic regression was conducted on the same subset of data to determine if psychological symptoms, pre-religion beliefs, and having religious friends would increase the probability of one becoming a Christian. The regression model was statistically significant $\chi^2(11)=41.88$, $p<.001$, Cox & Snell $R^2=.10$. Analysis showed that believing that there is only one true religion (vis-a-vis that many religions can be true and that all religions can at most be

partially true), b=2.97, SE=.56, Wald=11.99, OR=19.49, p<.001, was predictive of whether one would become a Christian.

Consequences of Religious Conversion

We conducted a series of mixed-design repeated-measure ANOVAs. The two factors are Time (baseline vs. follow-up) and Conversion (converts vs. Christians vs. non-Christians). The purpose was to examine if the above psychological characteristics changed over time, were different among the three groups, and more importantly, if the changes over time were different among the groups. The sizes of the interaction effects (indicating that the three groups changed at different rates over time) are shown in Figure 1.

Personality. The main effect of Time was significant in four of the Big Five. Extroversion, agreeableness, and openness to experience declined over time, while emotional stability improved over time. As expected, there were differences among the three groups on extroversion and emotional stability. However, more relevant to our hypotheses, there was no significant interaction between Time and Conversion. The converts' personality change, if any, was no different from that experienced by the other two groups.

Social axioms. There was an interaction effect between Time and Conversion on religiosity (Wilks' Λ=.95, $F(2,227)$=5.53, p<.01, partial η^2= .046). The converts' level of religiosity was initially low, and closer to that of the non-believers than to the Christians (Figure 2). Both were lower than that of the Christians ($F(2,227)$=52.06, p<.001, partial η^2=.314). It rose over time, although not to the Christians' level. The Christian group was significantly lower on fate control than the two other groups ($F(2,227)$=8.50, p<.001, partial η^2=.070), but there was no interaction between Time and Conversion on this social axiom. As for the other three social axioms (social cynicism, reward for application, and social complexity), there was no main effect

of Time or interaction effect between Time and Conversion. Neither was there main effect among the three groups of participants.

Values. On the whole, the pattern of converts' value change over time is different from that of Christians and non-believers. Changes in specific values are described below, and presented graphically in Figure 3.

Conformity. As found in previous studies, Christians were marginally higher in conformity than the two groups of non-believers ($F(2,227)=7.29$, $p<.055$, partial $\eta^2=.060$) at baseline. Before conversion occurred, the converts were midway between the Christians and the non-believers on this value. Although not statistically significant, the initial difference between the converts and the non-believers suggests that this personal value may be a factor that predisposes an individual to conversion. The interaction effect between Time and Conversion (Figure 3) showed a decline in the converts' conformity (Wilks' $\Lambda=.97$, $F(2,227)=4.09$, $p<.05$, partial $\eta^2=.035$). The paradoxical phenomenon that the converts have become more like the non-believers will be discussed in the next section.

Tradition. As shown in Figure 3, there was an interaction effect between Time and Conversion on tradition value (Wilks' $\Lambda=.93$, $F(2,227)=6.84$, $p<.01$, partial $\eta^2=.057$). The converts' emphasis on this value went up from the pre-conversion, baseline level which was not different from that of the non-believers, to become more similar to that of the Christians. There was a small but significant decline in this value among the Christians over time.

Benevolence. Consistent with what previous research has shown, Christians were higher than the other two groups on this value. The interaction effect was statistically significant (Wilks' $\Lambda=.96$, $F(2,227)=4.47$, $p<.05$, partial $\eta^2=.038$). Post hoc analysis of the interaction effect between Time and Conversion showed a decline in this value over time for both the Christians

(t(91)=2.22, p<.05) and non-believers (t(91)=2.82, p<.01), but an increase for the converts (t(45)=2.92, p<.01). The converts had originally been similar to the non-believers at baseline; after conversion they became more similar to the Christians.

Achievement. There was a general decline of achievement value over time, and that Christians were lower (though not statistically significant) than non-believers on this value. However, a more important observation is that the drop in their achievement value was steeper among the converts than among the other two groups. The interaction effect was statistically significant (Wilks' Λ=.96, F(2,227)=4.68, p<.05, partial η^2=.040). The converts have now adopted the values of their Christian counterparts.

Power. The interaction effect was significant (Wilks' Λ=.97, F(2,227)=4.15, p<.05, partial η^2=.035). Across the three-year period non-believers became more emphasizing of power value than Christians did, while there was not much change in the two other groups.

Psychological symptoms. There was a significant decline in depressive mood over time for all three groups (Wilks' Λ=.910, F(1,227)=22.51, p<.001, partial η^2=.090). Depressive mood among converts was slightly although not significantly higher than that of the other two groups pre-conversion, and declined somewhat more sharply post-conversion. The interaction effect was marginally significant (F(2,227)=2.37, p=.09). There was also a main effect of Time on anxiety (Wilks' Λ=.917, F(1,227)=20.55, p<.001, partial η^2=.083), showing a drop in anxiety over the three years. At baseline, the anxiety level of the converts was higher than that of the non-believers (t(136)=2.11, p<.05). The convert group's subsequent decline was much sharper than in the other groups, as evidenced in a significant interaction effect (Wilks' Λ=.961, F(2,227)=4.65, p<.05, partial η^2=.039).

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There was a main effect of Time on stress (Wilks' Λ=.941, $F(1,227)$=14.11, $p<.001$, partial η^2=.059). This decline was contributed primarily by the convert group (Figure 4). There was relatively less change in stress in the other groups. Thus, the interaction effect was significant (Wilks' Λ=.931, $F(2,227)$=8.46, $p<.001$, partial η^2=.069).

Discussion

Does religious conversion happen because of a person's psychological characteristics, or does religious conversion result in those psychological characteristics? This study is one of the few longitudinal studies that could address this question, with systematic, pre-conversion measures of psychological variables collected without relying upon the new converts' recall. Baseline data were collected on Christians and non-Christians some of whom would later convert to Christianity. The subsamples were matched on important demographic characteristics. Hence, comparison on our study variables could be made with a reasonable degree of internal validity. With this methodological improvement, we expanded our knowledge about religious conversion.

Predictors of Religious Conversion

The present study shows that a non-Christian's personality, social axioms, personal values, and psychological symptoms cannot be used to predict subsequent conversion (H1, H2). The religiousness of one's social network does not predict conversion either (H5). Converts and non-converts do not differ in their major life events at baseline (H3).

The hypothesis (H4) that people already holding some pre-religion beliefs would be more likely to be converted received partial support. The belief in the existence of a personal God and the belief in the harmony between faith and science do not have much impact on a non-believer

becoming religious. However, people who think that there is one and only one true religion are more likely than others to become converted.

Do people make the religion, or does religion make the people? Our logistic regression showed, on the one hand, non-believers who think that there is only one true religion would be somewhat easier to convert. On the other hand, there is little support for the view that personal characteristics constitute the major factor of conversion (H1, H2). Hence, it would be difficult to make a strong argument that people with a personality, social axiom, and value profile of a Christian are more likely to become converted to Christianity. The differences observed in previous studies between the religious believers and the non-believers have not originated from self-selection. There is little support for the person-religion fit model in understanding the dynamics of religious conversion. Neither could we find strong support for the alternative, meaning system perspective, that religious conversion is triggered by a search for meaning in the midst of major life events. Our findings seem to be consistent with the view that conversion can come in all shapes, as long as one believes that there is only one true religion. Rich or poor, neurotic or poised, sick or healthy – any person can become a Christian without any predispositions or triggering events.

Consequences of Religious Conversion

As predicted in H10, we found that converts' levels of anxiety and stress declined fairly sharply over the three-year period in which religious conversion occurred. This is consistent with Schnitker et al.'s (2014) observation that religious people's re-commitment to God (although not a religious conversion by the definition adopted in this article) predicted subsequent improvement in intrapsychic functioning such as life satisfaction, self-esteem, and vitality. Whether the improvement is brought about by a new social environment, a strengthened social

support network, or a new perspective in life ushered in by the new religion is beyond the scope of this paper. However, it suffices to suggest that the observed decline in anxiety and stress may also account for the often-observed difference between religious people and the non-religious on well-being measures.

Although people's prior values would not make them religious believers, a causality in the opposite direction is more likely. As predicted in H8 and H9, conversion would be accompanied by, if not result in, the person's forgoing some self-enhancement values such as power and achievement, and acquisition of some self-transcendent and conservation values (such as benevolence, conformity, and tradition). A new convert's value profile shifts away from those commonly held by non-believers, and becomes more Christian-like. The changes in values we so far observed may partially account for behavioral differences between religious believers and non-believers. For instance, after people are converted to Christianity, their level of benevolence value is elevated to that of the Christian believers. This echoes Schnitker et al.'s (2014) finding that spiritual and religious transformation in a youth camp predicted subsequent improvement in moral sociability functioning (which comprised patience, gratitude, and sense of responsibility). It is also consistent with the observation that religious people engage in more charitable activities (Stavrova & Siegers, 2014) and are more forgiving (Davis, Worthington, Hook, & Hill, 2013; Fehr, Gelfand, & Nag, 2010), when compared to the non-religious.

The converts' decline in conformity level and away from that of the Christians deserves some discussion, given that Christians have been found to be higher than non-religious people on this value (Saroglou et al., 2004). We offer the following speculation. The religious decision that the new converts had made was against the norm of a highly secularized society. On religious matters, these individuals were a minority. To be in congruence with the religious decision they

have made they might have to put less emphasis on the conformity value. We further suspect that a person who becomes a religious believer is probably someone who does not mind resisting the social pressure and expectation prevalent in a secular society. Thus, adopting a non-conformist mindset is part of the process of becoming a Christian. We also speculate that this shift to be less conforming would be temporary; when the new converts receive social influence from their Christian peers, conformity value would be emphasized again, even to a degree higher than before.

Despite previous findings that Christians and non-religious people differ in almost all ten Schwartz values, the present study revealed changes in only some values. Two explanations can be offered. Methodologically, perhaps the size of our sample did not afford sufficient power for the detection of the smaller changes in the other values. Second, changes in certain values, whether through socialization or other mechanisms, may require a time interval longer than a couple of years. The validity of these explanations awaits further testing with a larger sample and a longer timeframe.

H7 predicted that as a person becomes converted, there will be an increase in religiosity social axiom, and a decrease in fate control belief. Without much surprise, the first part of the hypothesis was supported; the second part was not. On the one hand, Christians are lower than non-believers on fate control belief (in this study) and less likely than Hindus to use divination to cope with difficulties (Young, Morris, Burrus, Krishnan, & Regmi, 2011). On the other hand, we failed to observe decline in fate control belief among the new converts. Perhaps this social axiom is so embedded in a complex network of beliefs that a much longer time is needed for its alteration. The same may be true for personality. We agree with Paloutzian (2014), who after reviewing the extant literature opined that "radical conversions in which a person has a complete

transformation of all aspects of life and belief and behavior are statistically rare" (p. 217). This statement is valid for our Chinese participants at least in the first one to three years of their Christian life. In corroboration of that, a follow-up analysis showed that the percentages of converts experiencing change of 0.5 standard deviation or more on a personality or social axiom dimension are not different from the non-converts experiencing similar degree of changes. It would take a much longer time for a newly converted Christian to gradually become more different from their former selves in terms of personality and axiomatic beliefs about the world.

Limitations and Future Directions

Religious converts are a rare breed. Religious conversions do not occur as frequently as researchers looking for participants would like. Over a period of three years and out of a sample of 455 originally non-Christians, only 10.11% became converted to Protestant Christianity. The size of this sample was unavoidably modest, thus limiting the power of our statistical analyses. (We would have gotten a much larger sample had we simply asked Christian participants to recall and report what they were like before conversion. However, we considered the opportunity of introducing methodological diversity from previous conversion research a benefit worthy of the price.) Therefore, cautions must be exercised when interpreting the lack of statistical significance, and future research must find ways to overcome this problem. That said, we can safely assume that given the relative conservativeness of the statistical tests, what emerged to be significant are indeed effects that cannot be ignored. For example, converts but not non-converts experienced changes in certain values and psychological symptoms over time. This pattern of findings strongly suggests that those psychological characteristics are more likely consequences rather than causes of conversion.

CHRISTIAN CONVERSION

The present study shed new light on how people's values and moods change as individuals who did not have a religious belief become Protestant Christians. However, as not all populations and religions are alike, it would therefore be legitimate to ask if our findings could be generalized to the non-Chinese and to conversion to other religions. For example, do people emphasize benevolence more as long as they experience a religious conversion, regardless of the religion they are converted to? Furthermore, would the change be similar if the converts originally had a particular religion? Would the change be reversed if de-conversion occurs? What if the conversion is to a religion-like ideology (e.g., atheism, Marxism, etc.)? Our findings reported above open up avenues of conversion research in different directions and populations.

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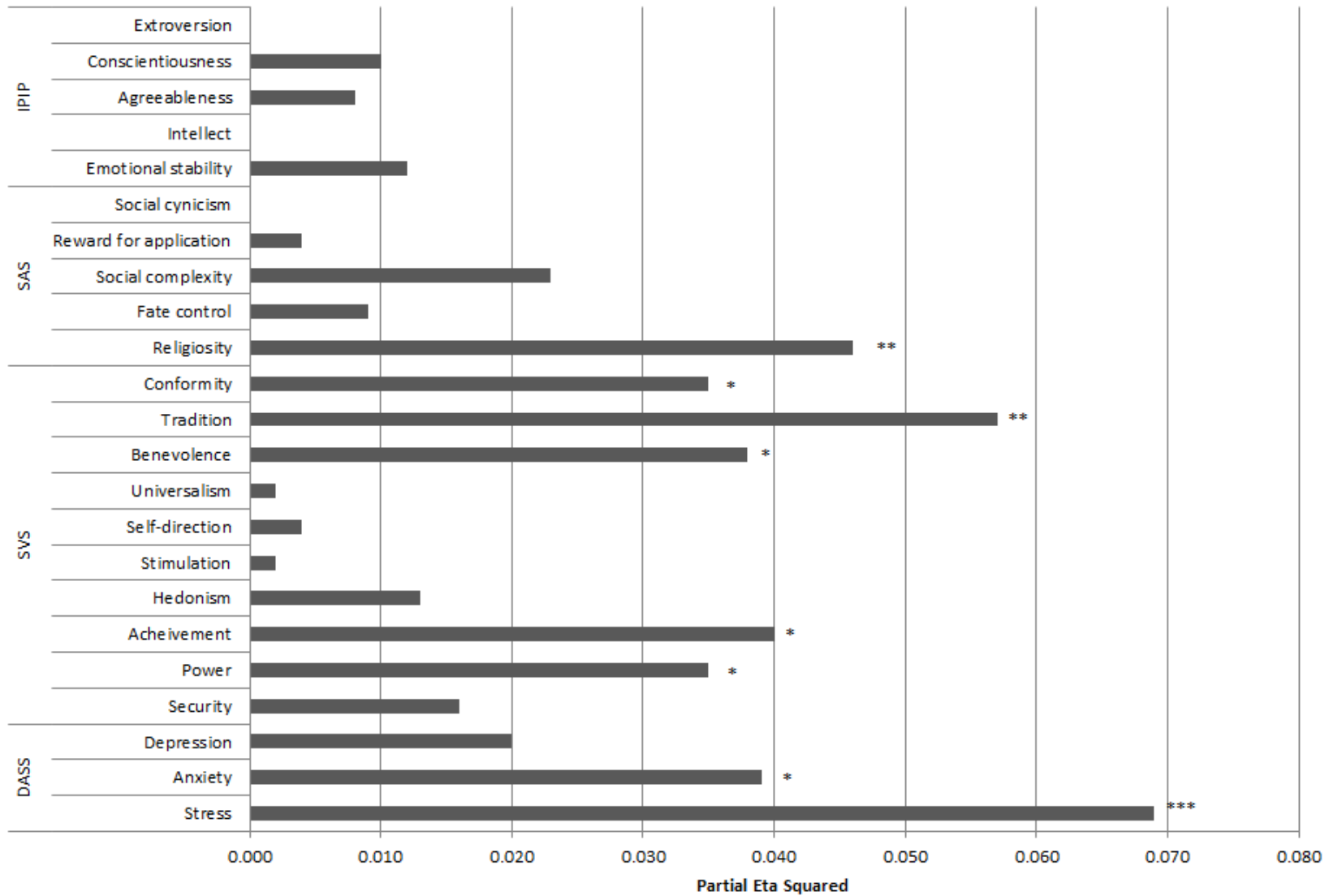
CHRISTIAN CONVERSION

Figure 1. A summary of interaction effects between time and conversion status. *p<.05; **p<.01; ***p<.001.
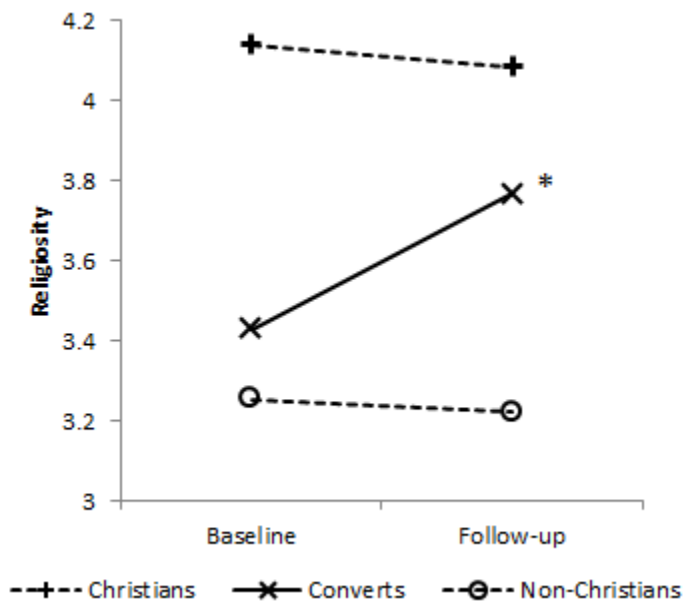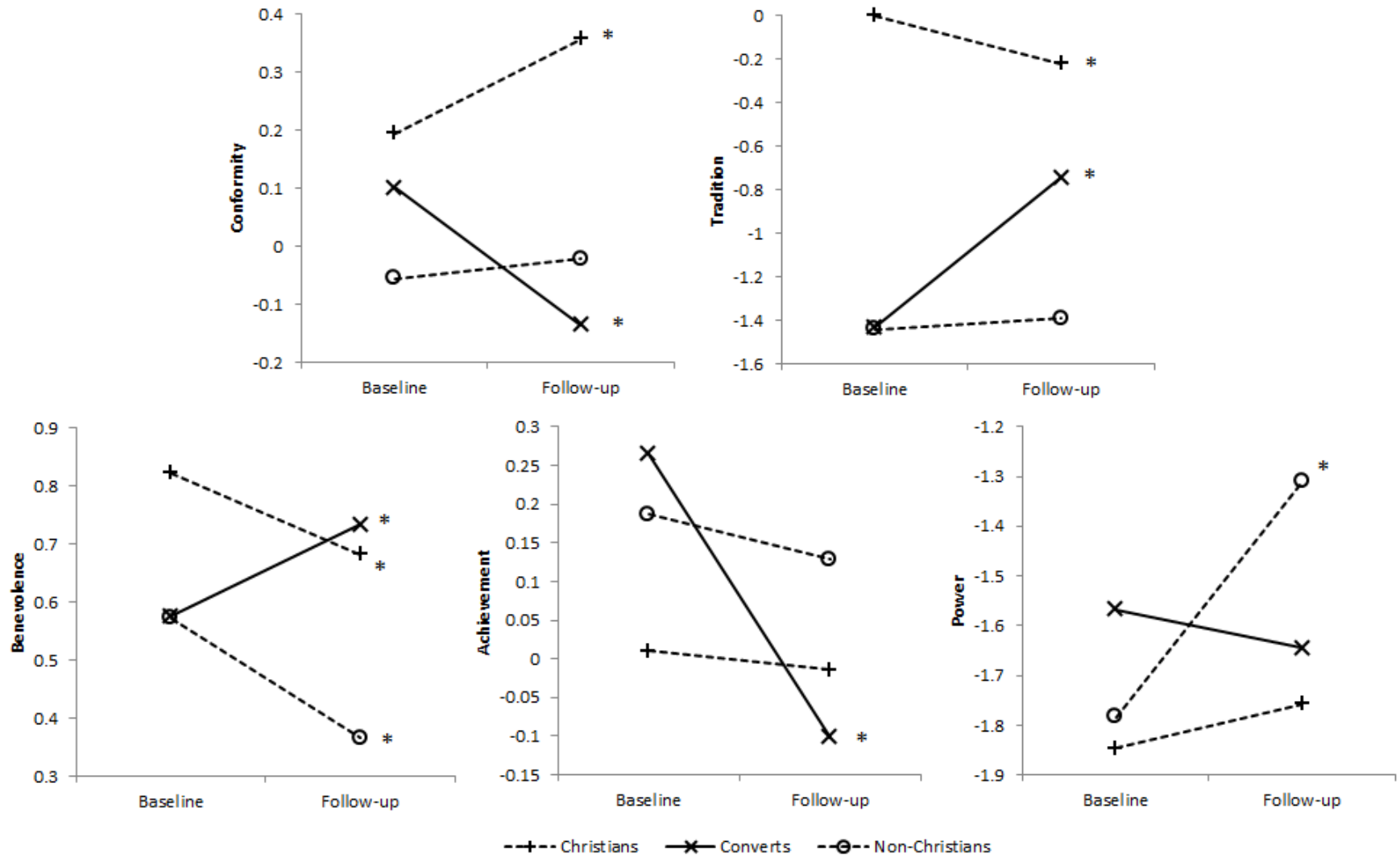
CHRISTIAN CONVERSION

Figure 2. Converts' change in religiosity as compared with Christians and non-Christians.
Note. An asterisk shows a statistically significant (p<.05) change over time.

Figure 3. Converts' change in personal values as compared with Christians and non-Christians.
Note. An asterisk shows a statistically significant (p<.05) change over time.
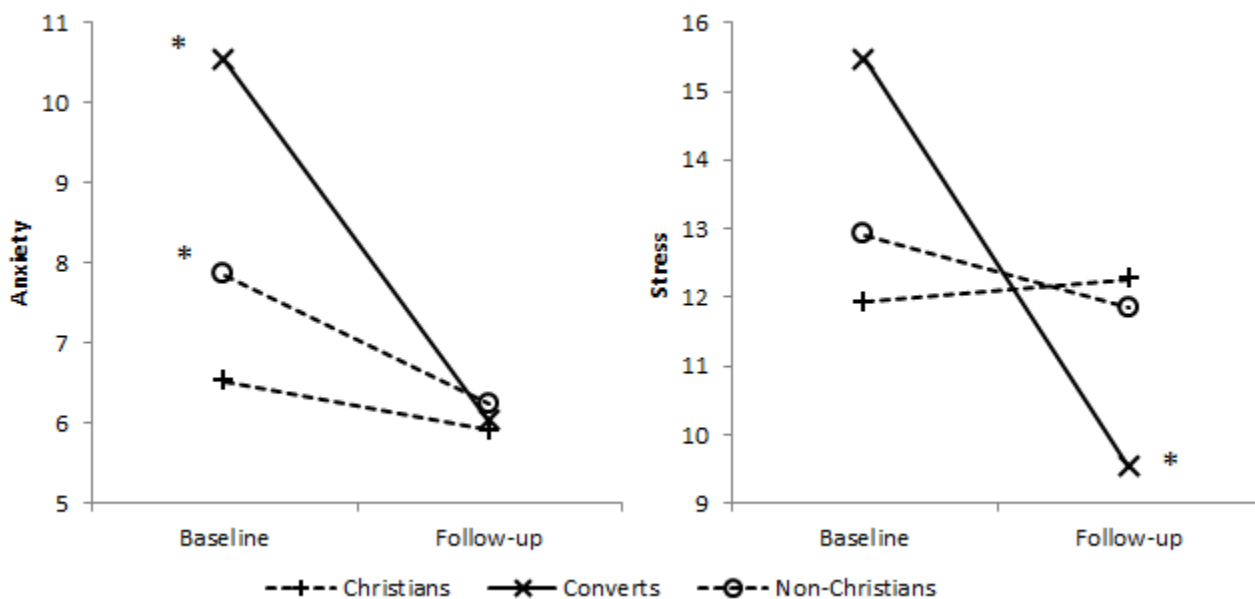
CHRISTIAN CONVERSION

Figure 4. Converts' change in anxiety and stress as compared with Christians and non-Christians.
Note. An asterisk shows a statistically significant (p<.05) change over time.