Psychological Changes During Faith Exit: A Three-Year Prospective Study

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This prospective study explored psychological changes during faith exit and attempted to identify individual characteristics of believers who would within a 3-year time frame become disengaged from their faith. Data were collected from 632 Chinese Protestant Christians, of whom 188 left their faith within 3 years after the 1st survey. The faith exiters' subsequent changes in personality, beliefs, and values, if any, were not any different from what were observed among other Christians. The only exceptions were that fate control belief and stimulation value increased more and religiosity social axiom declined more among the exiters than among those who stayed in faith. Latent growth mixture modeling indicated that about half of the faith exiters would initially experience an improvement in psychological symptoms, and the other half a deterioration. Poor quality of life at baseline was a risk factor for increase in psychological symptoms postexit. Besides being more likely to be a university student, the would-be exiters had a beliefs and values profile that was more similar to that of the nonbelievers than of the believers in other studies. However, with the exception of low emotional stability, the Big Five did not predict exit. The findings strongly suggest that changes in beliefs and values might have begun long before the actual faith exit, whereas personality change, if any, might take a long time after the transition. Changes in psychological symptoms after faith exit can be multitrajectory.

Keywords: longitudinal study, Christianity, conversion, religious transition, growth mixture modeling

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It is not uncommon for religious believers in a highly secularized or pluralistic society to move from one congregation to another, to experience a decline in religiosity−spirituality, or to exit from their original religion (Astin, Astin, & Lindholm, 2011; Suh & Russell, 2015). In this article we focus on the last category, which includes instances of switching to another religion or denomination, as well as becoming nonreligious altogether. Within Protestant Christianity, some believers are not merely reducing the frequency of their religious activities or becoming less believing of certain religious dogma in their faith tradition. Some may adopt labels such as *agnostic, freethinker, secular humanist,* or *atheist* in their identity formation process, whereas others simply become apathetic about God (J. M. Smith, 2011). They become disengaged from their original faith.

There is a body of literature on predictors of this special kind of religious transformation. For example, Uecker, Regnerus, and Vaaler (2007) wrote that "declines in religious participation could be indicative of the rampant religious privatization" (p. 1686). In a cross-sectional retrospective study, Loveland (2003) observed that joining a church while one was growing up was a negative predictor of faith exit, whereas lapse in religious practices was a positive predictor. Regnerus and Uecker (2006) identified risk-taking personality, being raised by a single parent, and prior sexual experience as predictors of emerging adults' rapid religious decline. A cross-sectional study by Streib, Hood, Keller, Csöff, and Silver (2009) found 53 German deconverts to be lower on environmental mastery, positive relations with others, purpose in life, and self-acceptance than were those who continued to believe. In the United States, 66 deconverts were higher on autonomy and personal growth than were those who stayed in the faith. Religious or nonreligious preference in adulthood was predicted by religious versus secular

upbringing (Merino, 2012). In retrospective studies, deconversion was found to be unrelated to personality but negatively related to religious socialization during childhood (Hunsberger, 1983). It was also related to whether one was religiously heterogamous (Brañas-Garza, García-Muñoz, & Neuman, 2013) or holding a liberal sex attitude (Brañas-Garza et al., 2013; Vargas, 2012). Thus, social and familial factors are important (Longo & Kim-Spoon, 2014). Using a prospective design, Hui, Lau, Lam, Cheung, and Lau (2015) found that such exit from faith can be predicted by a full-time university student status and low extraversion, as well as by high value priorities on self-direction, stimulation (which is putting emphasis on excitement, novelty, and challenges in life), and power (which comprises social status, prestige, and dominance over people and resources).

However, relatively little is known about the changes that result from or accompany a transition out of a religion. Using a longitudinal survey data set, Glass, Sutton, and Fitzgerald (2015) found that leaving the Christian faith resulted in a delay of family formation. However, noticeably absent from the discussion is longitudinal data on whether and how people change psychologically. To fill the gap, the primary objective of the present research was to examine the psychological changes around the time of faith exit.

Faith Exit Defined

Hui et al. (2015) made a distinction between *church exit* and *faith exit.* Some who have left their faith may still attend church, for nonreligious reasons. That is, faith exit may or may not involve withdrawal from the religious organization, although often it does. This construct overlaps much with what Streib and Keller (2004) described as *religious deconversion,* which includes a loss of specific religious experiences (experiential dimension); intellectual doubt, denial, or disagreement with specific beliefs (ideological dimension); moral criticism (ritualistic dimension); and emotional suffering with loss of embeddedness (consequential dimension). The final outcome is the disaffiliation from the religious community. This is an "intense biographical change that includes individual and social aspects" (Streib, 2014, p. 273). That there are several facets in which one can experience loss implies that the beginning and end of an exit from faith may not be easily demarcated. However, some writers (e.g., Cragun & Hammer, 2011) have felt that the use of the term *deconversion* is misleading, because the change of religious identity from one to another can always be considered a "conversion."

To avoid ambiguity, in this study we operationally define *faith exiters* as people who had previously described themselves as Protestant Christians but at a later time did not make such self-identification. These individuals may then be describing themselves using other religious labels or none at all. Similar conceptualizations have been adopted by other researchers (e.g., Glass et al., 2015; Suh & Russell, 2015).

Faith exit can be protracted or uneventful. As some scholars (e.g., LeDrew, 2013; J. M. Smith, 2011) have found, for some people it began with doubt, anger, or merely indifference, sometimes strengthened by the social group one was associated with, followed by decreasing frequencies of religious activities and the adoption of a non-Christian self-identity. Adolescents who disengaged might simply have lost interest (C. Smith & Denton, 2005). Some people make a public announcement of this new identity, whereas others do not (LeDrew, 2013).

Faith Exit as a Positive Event

People who exit their faith might have had some previously unfulfilled needs. The needs may be intellectual (e.g., when facing intellectual challenges on the veracity of their faith), emotional (e.g., when feeling being abandoned by God), social (e.g., when having interpersonal conflicts with religious leaders or having difficulty being integrated into a social network in church), or existential (e.g., when puzzling over the meaning of life). As people engage in a "complex process of identity formation," they may gain or regain a sense of belonging (Bullivant, 2015, p. 101). There is the prospect that at least some of those needs might be satisfied upon one's transition to another religion or nonreligion. If it is true that the unfulfilled needs have a negative effect on well-being, the person should now emerge as better in well-being, after leaving behind a religion that allegedly had brought need unfulfillment and suffering.

A similar inference can be made from the conceptualization offered by Streib et al. (2009). The researchers distinguished among four types of deconverts: (a) those in pursuit of autonomy outside of an environment in which they were brought up, (b) those disillusioned by and rejecting of high-tension religious organizations that gave empty promises to solve all problems, (c) those searching for a new and often intense frame of reference, and (d) those who leave a religion because it does not adequately meet religious needs and expectations. In all four instances becoming a nonbeliever can be regarded as a conclusion or relief if not a solution to the spiritual struggles and dissatisfaction.

Corroborating this is an interview study of college students with a strong religious family background but who later exited their faith. Some interviewees reported that "they were their own person now, they could stake out their own identity, they were freer, more open-minded, and they had been strong enough to do a very difficult thing" (Altemeyer & Hunsberger, 1997, p. 215). Likewise, J. M. Smith's (2011) interviewees used positive terms like *freedom* and *liberation* to describe their experience after "coming out" with the new identity of an atheist. The departing individuals can be described as headed for a better emotional state and psychological maturity.

Faith Exit as a Negative Event

There are reasons to expect the opposite, however. First, religiosity is linked empirically to many health behaviors. Koenig (2012) reviewed over 3,000 studies and concluded that the majority of these studies showed that religious people are better in coping with adversity, in having positive emotions (e.g., happiness, hope, optimism, meaningfulness, sense of control, and self-esteem). They are lower in depression, suicide, anxiety, psychosis, bipolar disorder, substance abuse, delinquency, and marital instability. They have more social support and social capital. If religiosity is associated with better subjective well-being (see, e.g., the meta-analysis by T. B. Smith, McCullough, & Poll, 2003; but see Galen & Kloet, 2011b, for a critique of the religion–health literature), becoming nonreligious could mean poorer health and subjective well-being. One reason is that leaving one's religion means leaving behind one's church community. For people who do not have alternative social support, this may have an indirect deleterious effect on well-being. Furthermore, if conversion to a religious faith is finding a solution to life's questions, leaving it may

mean losing the meaning system (Park, 2005). From her interviews of nuns who had left Catholic convents, Ebaugh (1988) concluded that the departure is emotionally and experientially difficult. For someone whose religion has become part of the core personality, leaving it may prove difficult, possibly resulting in depressive mood and anxiety.

Can Both Be True?

Another approach is to take a more dynamic perspective on the change. This may involve a search for a normative growth curve that shows how faith exiters experience both positive and negative moods over time. For instance, people may go through a state of euphoria or confusion initially, later returning to the population mean or the individual's own baseline and continuing the trajectory. This would be the prediction on the basis of the set-point theory (Lykken, 1999) and its variants. Many of the 25 former Protestant ministers whom Lee (2015) interviewed reported that shortly after the disaffiliation there was a decline in happiness and well-being, probably due to tension in familial and social relationships. However, as time went by, a heightened sense of intellectual freedom, peace, empowerment, and autonomy developed.

Yet another approach that can complement the previous one is to identify discrete trajectories of psychological changes that precede and accompany the faith transition. In doing so we can also describe predictors that may explain why an individual is more likely to follow one trajectory than another. Given that faith exiters, like other individuals, have diverse backgrounds and life events, it is possible that some may experience positive psychological changes whereas others negative psychological changes during their exit. Identifying these distinct courses will enrich theoretical work on religious transition.

Personality, Beliefs, Values, and Faith Exit

Past research has shown that religious believers and nonbelievers differ in certain personality traits, social axioms, and values. For example, compared to the nonreligious, those who are affiliated with a religion are higher on conscientiousness (Taylor & MacDonald, 1999) and emotional stability (Saroglou, 2002) but lower on openness to experience (Saroglou, 2002; Saroglou & Muñoz-García, 2008). Some studies, however, have reported a curvilinear relationship between religious identity and emotional stability (Galen, 2015; Galen & Kloet, 2011a). A meta-analysis of 71 samples in 19 countries showed that compared to the less religious, the religious people are higher on agreeableness and conscientiousness (Saroglou, 2010), although one study did not find significant differences between those two groups on agreeableness and conscientiousness after demographic and group attendance were controlled (Galen & Kloet, 2011b). Religious people are understandably higher on the social axiom religiosity (K. Leung & Bond, 2004) and lower on fate control, which is the belief that events are predetermined by some impersonal forces and that there are ways to alter these fated outcomes (Zhou, Leung, & Bond, 2009). Belief in religion is positively correlated with the values of tradition, conformity, and benevolence and negatively with the values of hedonism, stimulation, and self-direction (Saroglou, Delpierre, & Dernelle, 2004). Some atheists see themselves as free thinkers (Bullivant, 2015). Compared to those who stay in their childhood faith, those who leave their religions have more liberal worldviews (Brinkerhoff & Mackie, 1993).

Given these associations, one obvious research question concerns causality. Are the differences, if any, on these psychological characteristics results of the exit? Or did the would-be exiters already possess some of the nonbelievers' psychological characteristics before the transition? If so, can these psychological characteristics at least partially account for the exit?

Another objective of this study, therefore, was to understand psychological antecedents of faith exit. A recent study (Hui et al., 2015) showed that faith exit can be predicted by certain personality trait and values. That prospective study lasted for only about 16 months. In the present study we worked with the same participant pool but took a time frame of 3 years to test whether the same or a different set of individual characteristics would predict this religious transition in a slightly longer time frame.

The Present Study

In summary, we hoped to achieve three goals in the present study: (a) to determine whether exiting from one's faith has positive or negative psychological consequences; (b) to understand whether and how personality, beliefs, and values change as Christian believers leave their faith; and (c) to further explore some predictors of faith exit.

Method

Sample

The present study was part of a large, multiwave web-based survey project on the formation and transformation of beliefs in Chinese. Participants were Chinese, most of them residing in Hong Kong but with some others in Macau and other parts of the world. The participants responded to an item on religious affiliation at six waves, the first of which was completed in 2009 and the sixth in 2012. A separate survey of a supplementary sample (to make up for participant attrition) was started a year later, again continuing for 3 years, to 2013. More details about this project and the data set can be found at Hui et al. (2015) and Lau et al. (2015). In the current study, we selected 632 individuals who at Wave 1 had identified themselves as Protestant Christians and who provided sufficient multiwave data for analyses (described in the Results section). At the Wave 6 survey, 188 individuals within this sample no longer made the same religious self-identification. About 82.5% of these "exiters" then called themselves nonbelievers, 1.9% Catholics, 5.8% Buddhists, 1.0% Taoists, and the rest "others." There were 53 men and 135 women; 124 were full-time students. Their ages ranged from 18 to 52 ($M = 23.71$, $SD = 6.40$). For comparison purposes, we used the SPSS FUZZY case-control matching algorithm to form a subsample of "stayers," who remained as Christians throughout the study, matched to the exiters on gender, age, and student status. A multivariate analysis of variance (MANOVA) confirmed that the two groups were comparable initially on these three demographic variables. This present sample partially overlaps with that used in Hui et al. (2015), because some of their 52 faith exiters have remained in the project until Wave 6 and therefore would be included in the present study.

Measures

The surveys were in Chinese. Table 1 displays a list of constructs and the waves at which they were measured. Missing data were handled with multiple imputation using an expectation-maximization algorithm within SPSS Version 23.

Personality. Extraversion, conscientiousness, agreeableness, intellect (openness to experience), and emotional stability were measured with the 50-item International Personality Item Pool Big Five domain scale (Goldberg et al., 2006) on a 5-point scale at Waves 1 and 6. The Chinese version was prepared and validated by Hui, Pak, and Cheng (2009). For the present sample, Cronbach's alphas ranged from .76 to .90. Scores could range from 1 to 5.

Social axioms. Using item−total correlations reported in previous research as a guide, we selected five items from each of the five subscales of the cross-culturally validated Social Axioms Scale (K. Leung et al., 2002) to measure social cynicism, reward for application, social complexity, fate control, and religiosity at Waves 1 and 6. A 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) was used. Mean scores could range from 1 to 5. Their Cronbach's alphas for this sample for the five subscales were .51, .71, .66, .65, and .79, respectively. Caution should be taken when interpreting the findings with the social cynicism subscale, which was somewhat low in internal consistency.

Personal values. The 57-item cross-culturally validated Schwartz Value Survey (Schwartz, 1996) was completed at Waves 1 and 6. The 10 values measured are conformity (restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms), tradition (respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provides), benevolence (preservation and enhancement of the welfare of people with whom one is in frequent personal contact), universalism (understanding, appreciation, tolerance and protection for the welfare of all people and for nature), self-direction (independent thought and action), stimulation (excitement, novelty, and challenge in life), hedonism (pleasure and sensuous gratification for oneself), achievement (personal success through demonstrating competence according to social standards), power (social status and prestige, control or dominance over people and resources), and security (safety, harmony, and stability of society, of relationships, and of self). Participants rated each item on its importance as a guiding life principle ($-1 =$ *opposed to my principles,* $0 =$ *not important,* $7 =$ *of supreme importance*). We

followed Schwartz's (1992) recommended procedure to convert the importance ratings into centered scores. Cronbach's alphas were .70, .36, .82, .87, .68, .65, .56, .80, .77, and .73, respectively, for the 10 values. These coefficients are very similar to that reported by Schwartz and Rubel (2005).

Psychological symptoms. The 21-item Depression Anxiety Stress Scales (Lovibond & Lovibond, 1995; Moussa, Lovibond, & Laube, 2001) was used to measure severity−frequency of depressive mood, anxiety, and stress during the previous week on a 4-point scale ranging from 0 (*no*) to 3 (*often*). This scale has been widely used and validated among Hong Kong Chinese (e.g., Wong, Cheung, Chan, Ma, & Tang, 2006). Cronbach's alphas of the scale for the current sample were .87 (depressive mood), .72 (anxiety), and .81 (stress). Following the test developer's instructions, we multiplied the aggregated ratings by 2. Hence, the theoretical range of these three scales is 0 to 42. The clinical cutoff values for depressive moods and anxiety are 28 and 20, respectively, according to Lovibond and Lovibond (1995). Sample items are "I found it hard to wind down" (depressive mood), "I felt that I was using a lot of nervous energy" (anxiety), and "I felt I was close to panic" (stress).

In addition to the key variables just describe, the following were measured, to enable a better characterization of the participants.

Quality of life. This variable was measured with the 28-item Hong Kong Chinese version of World Health Organization Quality of Life Measures (K. F. Leung, Tay, Cheng, & Lin, 1997). Items were measured on a 5-point Likert scale ranging from 1 to 5, with a higher rating representing better quality of life. This cross-culturally validated measurement has been widely used in Hong Kong (e.g., Zhang et al., 2014). For the current study, we excluded an item on sex life (for being too intrusive). The scale comprises four subscales, namely physical health (e.g., "To what extent do you feel that physical pain prevents you from doing what you need to to?"), psychological health (culturally adjusted for Hong Kong; e.g., "How much do you enjoy life?"), social relationships (e.g., "How satisfied are you with your personal relationship?"), and environment (e.g., "How healthy is your physical environment?"). The theoretical range of these four subscales is 4−20. Cronbach's alphas for this sample were .68, .83, .56, and .63, respectively, similar to what has been reported previously (e.g., K. F. Leung, Wong, Tay, Chu, & Ng, 2005).

Faith maturity. This was assessed with the short form (comprising 12 items) of the Faith Maturity Scale (FMS; Benson, Donahue, & Erickson, 1993). On the basis of a validation study using a Chinese sample (Hui, Ng, Mok, Lau, & Cheung, 2011), two items were excluded. The FMS consists of two subscales, namely vertical and horizontal. The *vertical* subscale measures a person's relationship with the transcendent. A sample item is "I have a real sense that God is guiding me." The *horizontal* subscale measures a person's concern for social justice and commitment to loving neighbors. A sample item is "I apply my faith to political and social issues." Participants rated each statement on a 7-point scale (1 = *never,* 4 = *occasionally,* 7 = *always*), with a higher score indicating higher faith maturity. The theoretical range of scores on these two subscales is 1–7. Cronbach's alphas for this sample were .87 and .75, respectively.

Poor sleep quality. This was measured with the 19-item Pittsburgh Sleep Quality Index (PSQI; Buysse, Reynolds, Monk, Berman, & Kupfer, 1989), which has been validated in Chinese samples (Ho & Fong, 2014; Tsai et al., 2005). The scale consists

Table 1
Psychological Constructs and When They Were Measured

Construct	Wave					
	1	2	3	4	5	6
Religious affiliation	√	√	√	√	√	√
Personality	√					√
Faith maturity	√		√		√	
Quality of life	√		√		√	√
Social axioms	√	√				√
Values	√					√
Religious practices	√		√		√	√
Church experiences	√		√		√	
Sleep quality		√	√		√	√
Psychological symptoms		√	√		√	√

of seven components, including subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleep medication, and daytime dysfunction. Total scores range from 0 to 21, with higher scores indicating poorer sleep quality. Cronbach's alpha was .64, comparable to that for data collected from nonclinical participants (e.g., Rener-Sitar, John, Bandyopadhyay, Howell, & Schiffman, 2014).

Religious practices. This construct was measured with nine items used by Hui et al. (2011). We employed an exploratory factor analysis with oblique Geomin rotation to identify solutions of one to five factors. Eigenvalues indicated that a three-factor solution was the best fit among the five factors (4.464, 1.146, 1.053, .846, .751). This was confirmed with a parallel analysis with 1,000 random sets of data (parallel analysis eigenvalues: 1.118, 1.073, 1.049, 1.032, .988). The first religious practices factor, labeled *personal,* comprises behaviors including (a) reading at least two books on faith during the past year, (b) talking about one's own faith to at least two persons during the past year, (c) attending Sunday school or other training sessions at least twice during the past week, and (d) praying–meditating on the Bible five or more times during the past week. The second factor, *communal,* comprises behaviors including (a) attending a church group meeting at least twice during the past month, (b) attending a small-group meeting at least twice during the past month, and (c) volunteering time to serve at church at least once during the past month. The third factor, *missionary,* comprises (a) attending activities related to missionary work during the past year and (b) giving financial support to missionary work during the past year. All items are binary. The maximum scores on these three subscales would be 4, 3, and 2, respectively, with a minimum of 0. Cronbach's alphas were .64, .80, and .62, respectively.

Church experiences. This construct was measured with 17 items written by the research team on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). An exploratory factor analysis with oblique Geomin rotation was used to identify one- to six-factor solutions. Eigenvalues for the six factors (5.500, 2.015, 1.129, .985, .938, .803) showed that a three-factor solution was appropriate. A parallel analysis with 1,000 random sets of data corroborated the results (parallel analysis eigenvalues: 1.169, 1.139, 1.115, 1.093, 1.073, 1.054). The first factor, *positive attitudes toward church practices,* was measured with seven items, three of which were positively worded (e.g., "Most of the decisions the church made were correct") and four of which were negatively worded (e.g., "Some church leaders were autocratic"). A high score indicates a positive attitude. The second factor, *ideological fit,* was measured with four negatively worded items. This subscale assesses whether the religious and/or spiritual values advocated by the church were aligned with the person's own. Examples of items include "There is a disconnect between church and my life" and "My church places too much emphasis on subjective feelings." Items were reverse-scored and averaged, with higher score indicating a stronger ideological fit. The third factor, *bonding with other church attendees,* was measured with six positively worded items (e.g., "The majority of my close friends and I go to the same church" and "I have a fairly good relationship with leaders in church"). Cronbach's alphas of these three factors were .83, .67, and .75, respectively.

Demographic variables. At Wave 1, participants reported their gender, age, how long they had been a Christian believer, and whether they were full-time students.

Results

Attrition Analysis

We compared the 632 cases selected and 1,599 cases that did not provide sufficient responses to subsequent waves of data collection. As can be seen in Table 2, the participants who remained in the study and those who were not included were similar in their demographic profiles and psychological characteristics. Those included in our study, however, were slightly higher in the values of tradition and benevolence and slightly lower in the value of achievement. They were also somewhat higher in horizontal faith maturity.

Preexisting Differences Between the Stayers and the Exiters

A MANOVA on personality, social axioms, and values showed a significant difference between the matched subsamples of exiters and stayers (Wilks's $\Lambda = .79$), $F(20, 355) = 4.60$, $p < .001$, $\eta_p^2 = .21$, at the baseline (Wave 1). As Table 3 shows, the exiters were lower on emotional stability and the religiosity social axiom. They were also lower on three values, namely conformity, tradition, and benevolence. The exiters were higher than the stayers on self-direction, stimulation, hedonism, and achievement. This pattern mirrors the differences between religious believers and nonbelievers reported in the literature (Saroglou et al., 2004). Another MANOVA that compared the two groups on their baseline measures on FMS−vertical, FMS−horizontal, religious practices, and church experiences was also statistically significant (Wilks's $\Lambda = .81$), $F(8, 367) = 10.62$, $p < .001$, $\eta_p^2 = .19$. Unsurprisingly, the believers who would later leave the faith were lower on FMS–vertical, religious practices (personal, communal, and missionary), and church experiences (attitudes toward church practices, ideological fit, and bonding).

A logistic regression was conducted on the sample of 682 individuals who at Wave 1 self-identified as Christian believers to search for psychological characteristics that might predict faith exit during the next 3 years. Gender, age, and status as a student were first entered as covariates, followed by the Big Five, values, and social axioms. The model was statistically significant, $\chi^2(23, N = 682) = 162.21$, $p < .001$; Cox & Snell $R^2 = .21$. The significant predictors were student status ($b = 1.21$, $SE = .21$, Wald $= 34.70$, $OR = 3.34$, $p < .001$, 95% confidence interval [CI: 2.24, 4.99]) and religiosity ($b = -1.08$, $SE = .22$, Wald $= 23.18$, $OR = .34$, $p < .001$, 95% CI [.22, .53]).

Exiters' Changes in Personality, Beliefs, and Values Over Time

We conducted a two-way mixed-design MANOVA to understand whether the exiters' changes over time differed from the stayers' on the Big Five, social axioms, and values (see Table 4). Results showed significant effects of time (Wilks's $\Lambda = .67$), $F(20, 355) = 8.58$, $p < .001$, $\eta_p^2 = .33$; group (Wilks's $\Lambda = .65$),

Table 2

Demographics and Psychological Characteristics Between Protestant Christians Selected and Not Selected in the Sample

Variable	Not selected ($n = 1{,}599$) M (SD)	Range	%	Selected ($n = 632$) M (SD)	Range	%	χ^2	t	d	Effect size Cramer's V
Gender (male)			29.9			32.0	$\chi^2(1) = 1.03$			.02
Annual household income (HK$)							$\chi^2(5) = 1.46$			.03
<10,000			17.7			17.2				
10,000–19,999			29.2			28.1				
20,000–29,999			17.5			16.4				
30,000–39,999			11.7			13.2				
40,000–49,999			8.0			8.5				
≥50,000			16.3			16.6				
Marital status										
Single			75.9			77.2	$\chi^2(1) = .42$			.01
Married, widowed, separated, or divorced			24.1			22.8				
Age (years)	29.08 (9.74)	18–67		29.64 (9.88)	18–63			$t(2223) = -1.25$	.06	
Personality										
Extraversion	3.17 (.70)			3.11 (.68)				$t(2223) = 1.81$	.09	
Conscientiousness	3.43 (.60)			3.46 (.60)				$t(2220) = -1.04$	.05	
Agreeableness	3.81 (.47)			3.83 (.45)				$t(2223) = -1.05$	.04	
Intellect	3.33 (.57)			3.37 (.59)				$t(2221) = -1.46$	.07	
Emotional stability	3.10 (.80)			3.16 (.80)				$t(2221) = -1.72$	.08	
Faith maturity										
Vertical dimension	4.99 (1.17)			5.08 (1.08)				$t(2223) = -1.55$	.09	
Horizontal dimension	3.72 (1.09)			3.84 (1.14)				$t(2224) = -2.48^*$	.11	
Quality of life										
Physical health	14.44 (2.00)			14.57 (1.93)			$t(2223) = -1.43$		.07	
Psychological health (HK-adjusted)	13.57 (2.29)			13.71 (2.20)				$t(2223) = -1.33$	.06	
Social relationship	13.81 (2.62)			13.75 (2.70)				$t(2219) = .43$	.02	
Environment	13.70 (2.06)			13.81 (1.98)				$t(2226) = -1.19$	.05	
Overall	14.14 (3.07)			14.32 (3.06)				$t(2226) = -1.27$	.06	
Overall health	12.00 (3.39)			12.19 (3.23)				$t(2226) = -1.20$	.06	
Social axiom										
Social cynicism	2.85 (.58)			2.88 (.60)				$t(1901) = -.76$	.05	
Reward for application	3.99 (.55)			3.95 (.51)				$t(1903) = 1.85$	.08	
Social complexity	4.24 (.44)			4.28 (.38)				$t(1903) = -1.92$	.10	
Fate control	2.87 (.71)			2.85 (.70)				$t(1902) = .51$	.03	
Religiosity	4.18 (.55)			4.20 (.54)				$t(1902) = -.42$	.04	
Values										
Conformity	.26 (.79)			.29 (.79)				$t(1889) = -.88$	.04	
Tradition	-.44 (1.07)			-.33 (1.07)				$t(1889) = -2.10^*$	.10	
Benevolence	.82 (.64)			.92 (.62)				$t(1889) = -3.18^{**}$	.16	
Universalism	.42 (.58)			.46 (.58)				$t(1889) = -1.24$	.07	
Self-direction	.17 (.71)			.19 (.71)				$t(1889) = -.68$	.03	
Stimulation	-1.06 (1.11)			-1.12 (1.01)				$t(1889) = 1.09$	.06	
Hedonism	-.58 (1.20)			-.62 (1.26)				$t(1889) = .74$	.03	
Achievement	.13 (.60)			.05 (.59)				$t(1889) = 2.66^{**}$	.13	
Power	-1.85 (1.11)			-1.96 (1.14)				$t(1889) = 1.89$	.10	
Security	.17 (.63)			.11 (.67)				$t(1889) = 1.87$	.09	
Religious practices										
Personal	1.86 (1.33)			1.97 (1.29)				$t(2216) = -1.75$	.08	
Communal	1.60 (1.16)			1.67 (1.15)				$t(2223) = -1.32$	.06	
Missionary	.94 (.80)			.98 (.81)				$t(2223) = -1.12$	.05	
Church experiences										
Attitudes toward church practices	3.71 (.63)			3.65 (.70)				$t(2205) = 1.89$	.09	
Ideological fit	3.59 (.68)			3.57 (.71)				$t(2207) = .44$	.03	
Bonding with other church attendees	3.34 (.68)			3.32 (.70)				$t(2208) = .73$	.03	
Poor sleep quality[a]	5.93 (2.55)			5.72 (2.48)				$t(1080) = 1.33$	.08	
Psychological symptoms[a]										
Depressive mood	7.97 (7.59)			7.49 (7.52)				$t(1289) = 1.12$	.06	
Anxiety	6.81 (5.94)			6.38 (5.94)				$t(1289) = 1.29$	.07	
Stress	12.20 (7.65)			11.58 (7.52)				$t(1289) = 1.44$	.08	

Note. HK = Hong Kong.

[a] Measured at Wave 2.

$^*\ p < .05.$ $^{**}\ p < .01.$

$F(20, 355) = 9.39$, $p < .001$, $\eta_p^2 = .35$; and their interaction (Wilks's $\Lambda = .90$), $F(20, 355) = 2.08$, $p = .005$, $\eta_p^2 = .11$. Comparing data from Waves 1 and 6 (see Table 4), we noticed a main effect of time, showing a decline in scores on extraversion, agreeableness, reward for application, religiosity, tradition, and benevolence over a period of 3 years. The scores on social cynicism, fate control, stimulation, hedonism, and power increased during the same period. Furthermore, there were main effects

Table 3

Comparison of Stayers and Exiters on Psychological Measures at Baseline

Measure	Stayers ($n = 188$)	Exiters ($n = 188$)	t[a]	d
Personality				
Extraversion	3.03 (.66)	2.98 (.72)	.71	.07
Conscientiousness	3.41 (.58)	3.34 (.61)	1.19	.12
Agreeableness	3.84 (.45)	3.78 (.51)	1.11	.12
Intellect	3.34 (.62)	3.35 (.58)	−.12	−.02
Emotional stability	3.13 (.74)	2.92 (.80)	2.54*	.27
Faith maturity				
Vertical dimension	5.05 (1.08)	4.29 (1.23)	6.38***	.66
Horizontal dimension	3.74 (1.14)	3.61 (1.05)	1.10	.12
Quality of life				
Physical health	14.27 (1.93)	14.05 (2.12)	1.06	.11
Psychological health[b]	13.52 (2.14)	13.04 (2.46)	2.02*	.21
Social relationship	13.57 (2.76)	13.48 (2.70)	.30	.03
Environment	13.99 (1.88)	13.28 (2.00)	3.55***	.37
Overall	14.14 (3.01)	13.40 (2.96)	2.40*	.25
Overall health	12.03 (3.11)	11.58 (3.23)	1.37	.14
Social axiom				
Social cynicism	2.84 (.56)	2.89 (.51)	−1.01	−.09
Reward for application	4.01 (.50)	4.01 (.50)	−.02	.00
Social complexity	4.31 (.36)	4.30 (.39)	.22	.02
Fate control	2.91 (.68)	3.02 (.63)	−1.56	−.17
Religiosity	4.20 (.51)	3.84 (.59)	6.18***	.65
Values				
Conformity	.33 (.70)	.03 (.73)	4.07***	.42
Tradition	−.19 (.96)	−1.01 (1.10)	7.77***	.79
Benevolence	.93 (.57)	.73 (.62)	3.21**	.34
Universalism	.39 (.56)	.43 (.59)	−.67	−.03
Self-direction	.16 (.66)	.37 (.64)	−3.10**	−.32
Stimulation	−1.14 (.95)	−.81 (1.00)	−3.29**	−.34
Hedonism	−.67 (1.25)	−.13 (1.20)	−4.26***	−.44
Achievement	.08 (.57)	.22 (.62)	−2.21*	−.24
Power	−1.93 (1.02)	−1.83 (1.13)	−.91	−.09
Security	.11 (.60)	.06 (.64)	.82	.08
Religious practices				
Personal	1.90 (1.29)	1.05 (1.22)	6.58***	.68
Communal	1.73 (1.14)	.82 (1.06)	8.01***	.83
Missionary	.98 (.81)	.62 (.73)	4.48***	.47
Church experiences				
Attitudes toward church practices	3.72 (.68)	3.44 (.68)	3.87***	.41
Ideological fit	3.68 (.65)	3.25 (.67)	6.36***	.65
Bonding with other church attendees	3.33 (.68)	3.00 (.62)	4.97***	.51
Poor sleep quality[c]	5.94 (2.62)	6.65 (2.37)	−2.76**	−.28
Psychological symptoms[c]				
Depressive mood	8.66 (7.58)	9.90 (7.67)	−1.58	−.16
Anxiety	7.04 (6.66)	7.78 (5.30)	−1.21	−.12
Stress	12.12 (7.50)	13.06 (7.07)	−1.24	−.13

Note. Data are means, with standard deviations in parentheses.
[a] Degree of freedom was 374. [b] Hong Kong adjusted. [c] Measured at Wave 2.
* $p < .05$. ** $p < .01$. *** $p < .001$.

between the stayers and the exiters on several variables. The stayers were higher than the exiters on emotional stability, religiosity, conformity, tradition, and benevolence. The exiters were higher on social cynicism, fate control, self-direction, stimulation, hedonism, achievement, and power. We repeated this analysis after filtering out exiters who became believers of other religions and obtained essentially the same set of results (see Table S1 in the online supplemental materials).[1]

More relevant to our concern was whether the stayers and exiters changed at different rates. Pertaining to this question, three interaction effects were found. First, as believers left their Christian faith, they became more believing in fate control than did the stayers, $F(1, 374) = 12.54$, $p < .001$, $\eta_p^2 = .03$. Second, compared to the stayers, exiters experienced a sharper decline on the religiosity social axiom, $F(1, 374) = 18.81$, $p < .001$, $\eta_p^2 = .05$. Third, over time stayers became less rejecting of the value stimulation, whereas the exiters had always been and continued to be less rejecting of this value, $F(1, 374) = 2.56$, $p = .022$, $\eta_p^2 = .01$. The group means at Wave 1 and Wave 6 are displayed in Figure 1. For the other variables, there was no interaction effect between time and group. In other words, any time-related change in the Big Five, three social axioms, and nine of the 10 values were not unique to those who exited their faith.

Exiters' Changes in Sleep Quality and Psychological Symptoms Over Time

Sleep quality and psychological symptoms were measured initially at Wave 2. We found that the exiters were higher on the PSQI than were the stayers but not different from the stayers on depressive mood, anxiety, or stress. Two-way mixed-design ANOVAs were conducted on sleep quality and the psychological symptoms to examine changes from Wave 2 to Wave 6. There was no time effect, but there was an interaction effect on sleep quality (see Figure 1), $F(1, 374) = 7.85$, $p = .005$, $\eta_p^2 = .02$, showing a deterioration of sleep over time for stayers but an improvement for exiters. As for the psychological symptoms, there was a significant reduction of depressive mood, $F(1, 374) = 13.79$, $p < .001$, $\eta_p^2 = .04$, and anxiety, $F(1, 374) = 4.70$, $p = .031$, $\eta_p^2 = .01$, but not stress, $F(1, 374) = 2.83$, *ns,* over time. The lack of an interaction effect suggested that improvements in these psychological symptoms did not depend on whether the person was disengaging from the Christian faith during that period.

We were particularly interested in changes in depressive mood and anxiety unique to the exiters. Because these two variables had been measured at four waves, we had sufficient data to conduct a latent growth modeling to explore nonlinear changes. However, the analysis did not reveal any trajectory that satisfied the fit index requirements.

One explanation for the lack of fit is that there were different patterns of change within the exiters sample. To clarify this, we used latent growth mixture modeling (GMM) to identify homogeneous subgroups (also called "classes") within our heterogeneous exiters sample. We also determined the size of each class and explored how they might differ from one another. In the psychology of religion literature, McCullough, Enders, Brion, and Jain (2005) employed GMM to differentiate three discrete trajectories of religious development.

This method makes use of the repeated measures of a variable (in our case, the psychological symptoms of anxiety and depressive mood) collected over a period of time. It identifies a latent class variable that captures growth parameters including both intercept and slope means. We used Mplus Version 7.2 (Muthén & Muthén, 1998–2015) to construct the GMM with linear and qua-

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[1] We thank an anonymous reviewer for making this suggestion.

Table 4

Differences Between Stayers and Exiters Over Time on Personality, Social Axioms, and Values

Variable	Time effect				Group effect				Interaction effect	
	Wave 1	Wave 6	F^a	η^2	Stayers	Exiters	F^a	η^2	F^a	η^2
Personality										
Extraversion	3.01 (.69)	2.88 (.68)	19.19***	.05	2.97 (.62)	2.92 (.62)	.595	.00	.00	.00
Conscientiousness	3.37 (.59)	3.42 (.52)	3.20	.01	3.44 (.51)	3.35 (.51)	2.81	.01	.37	.01
Agreeableness	3.81 (.48)	3.68 (.45)	33.71***	.09	3.77 (.41)	3.72 (.41)	1.54	.00	.01	.00
Intellect	3.35 (.60)	3.30 (.55)	2.87	.01	3.33 (.52)	3.33 (.52)	.00	.00	.05	.00
Emotional stability	3.06 (.77)	3.06 (.74)	.85	.00	3.17 (.66)	2.91 (.66)	14.50***	.04	2.32	.01
Social axiom										
Social cynicism	2.86 (.54)	2.93 (.52)	5.29*	.01	2.85 (.44)	2.95 (.44)	4.50*	.01	1.98	.01
Reward for application	4.01 (.50)	3.94 (.43)	7.21**	.02	3.99 (.40)	3.96 (.40)	.68	.00	1.68	.00
Social complexity	4.30 (.38)	4.34 (.31)	2.50	.01	4.33 (.27)	4.31 (.27)	.43	.00	.21	.00
Fate control	2.97 (.66)	3.07 (.62)	9.78**	.03	2.91 (.53)	3.13 (.53)	15.88***	.04	12.54***	.03
Religiosity	4.02 (.58)	3.81 (.60)	46.27***	.12	4.16 (.44)	3.67 (.44)	115.95***	.31	18.81***	.05
Values										
Conformity	.18 (.73)	.12 (.65)	2.85	.01	.30 (.58)	−.01 (.58)	27.42***	.07	.07	.00
Tradition	−.60 (1.11)	−.93 (1.07)	25.56***	.07	−.39 (.81)	−1.15 (.81)	83.36***	.22	1.04	.00
Benevolence	.83 (.60)	.60 (.54)	50.70***	.14	.83 (.47)	.60 (.47)	23.22***	.06	.98	.00
Universalism	.41 (.58)	.40 (.51)	.16	.00	.38 (.47)	.43 (.47)	.75	.00	.01	.00
Self-Direction	.27 (.66)	.30 (.58)	1.26	.00	.18 (.52)	.39 (.52)	15.51***	.04	.01	.00
Stimulation	−.97 (.99)	−.84 (.82)	3.17*	.02	−1.01 (.75)	−.80 (.75)	7.54**	.02	2.56*	.01
Hedonism	−.40 (1.25)	−.23 (.96)	5.13*	.02	−.56 (.89)	−.07 (.89)	28.54***	.08	.42	.00
Achievement	.15 (.60)	.13 (.56)	.43	.00	.08 (.51)	.20 (.51)	5.24*	.01	.06	.00
Power	−1.88 (1.08)	−1.52 (.99)	43.22***	.12	−1.80 (.88)	−1.61 (.88)	4.55*	.01	2.85	.01
Security	.08 (.62)	.17 (.53)	5.93*	.02	.13 (.47)	.12 (.47)	.03	.00	1.60	.00

Note. Data are means, with standard deviations in parentheses.
^a Degrees of freedom: (1, 374).
* $p < .05$.   ** $p < .01$.   *** $p < .001$.

dratic effects of time. Each individual's psychological symptoms data at different waves were anchored by Time 0, that is, the wave at which "no religion" or a religious affiliation other than Protestant Christianity was self-reported. To determine the number of latent classes, we used Akaike information criteria (AIC), Bayesian information criteria (BIC), and sample-size adjusted BIC (ABIC) to compare the fit of models with various numbers of latent classes. Smaller values of information criterion indices indicate better model fit (Nylund, Asparouhov, & Muthén, 2007). For complex models, one tends to favor AIC (Lin & Dayton, 1997). An entropy value was also used to indicate the precision in class membership estimation (Nylund et al., 2007).

By the criteria previously explained, we found the five-class model the most parsimonious and at the same time most complete in describing changes in anxiety (see Table 5). Figure 2 displays the anxiety level of the five classes, estimated for the waves before and after the faith exit. The five classes of trajectories were distinct based on both their initial levels of anxiety and their pattern of change in anxiety over time. The first two were high anxiety resolving (Class 1; 10.46% of the subsample) and moderate anxiety resolving (Class 2; 18.84%). There were also three parabolic classes, showing curvilinear trends: moderate anxiety increasing at exit then beginning to resolve (Class 3; 26.77%), moderate anxiety resolving at exit then beginning to increase (Class 4; 17.79%), and low anxiety increasing at exit then beginning to resolve (Class 5; 26.14%).

For comparison purposes, we repeated the same analytical procedure on the matched subsample of 188 stayers. Six classes of trajectories in changes in anxiety during the period could be

identified: low anxiety remaining low (77.13%), moderate anxiety remaining moderate (9.57%), high anxiety resolving (3.19%), low anxiety but increasing (6.38%), and two classes of high fluctuating anxiety (3.24% in total). In terms of psychological symptoms, the most distinctive feature among the stayers, besides being stable throughout the study period, was the relatively lower heterogeneity. The majority of these individuals were low in anxiety during the entire study period.

We then compared the five trajectory classes of exiters on their mean levels of several demographic variables, as well as the following variables measured during the wave prior to when a non-Christian identity was reported. These variables included faith maturity, religious practices, quality of life, church experiences, and personality. The MANOVA results showed significant differences among the five classes (Wilks's $\Lambda = .47$), $F(84, 591) = 1.50$, $p = .004$, $\eta_p^2 = .17$.

As shown in Table 6, the five classes of exiters were not significantly different from each other on age, faith maturity, and conversion length. Nonetheless, individuals in Class 1 reported lower quality of life (physical health, psychological health, environment, and overall) and lower emotional stability. Individuals in Class 2 engaged in more personal religious practices than did their counterparts and reported the highest ideological fit with their churches. Individuals in Class 3 reported low quality of life (overall health). They were also low on extraversion and emotional stability. Individuals in Class 4 were among the highest on quality of life (physical health, psychological health, environment, and overall health), extraversion, and emotional stability. Individuals in Class 5 were high on quality of life (overall health). That said,
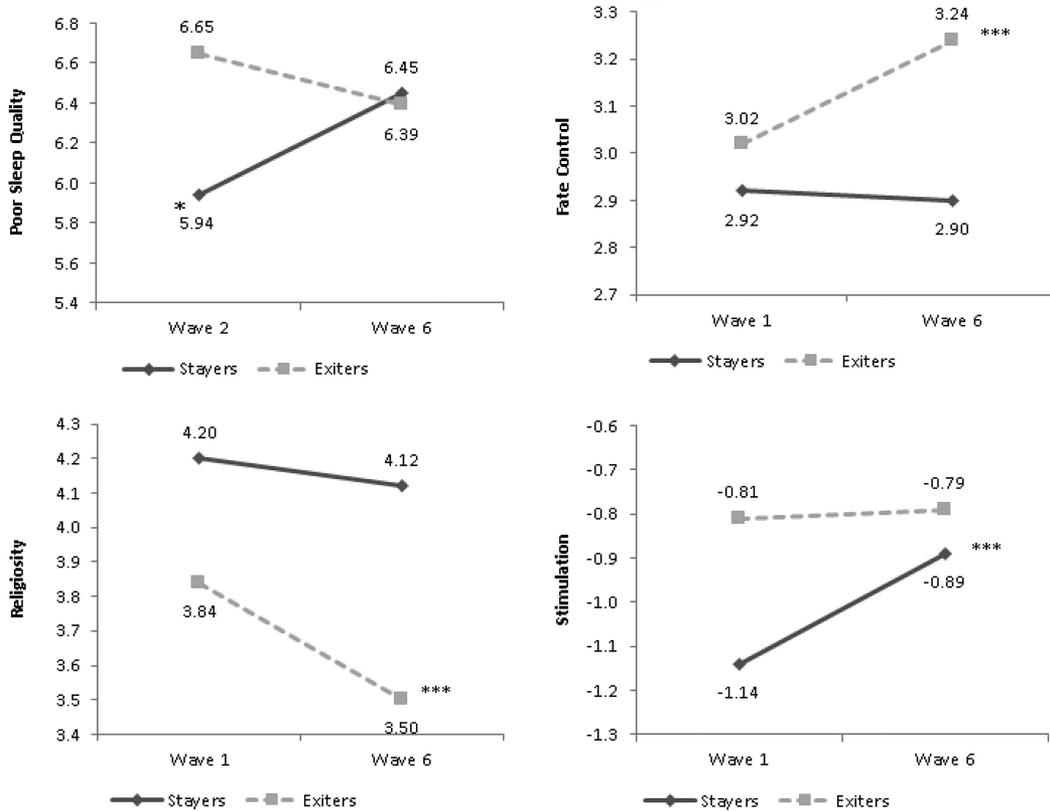
Figure 1. Differences in stayers' and exiters' changes in sleep quality, fate control belief, religiosity, and stimulation value over time. For the exiters, religious transition occurred between Wave 1 and Wave 6. Statistically significant within-group changes over time are indicated by asterisks. * $p < .05$. *** $p < .001$.

the mean differences between some pairs of trajectory classes were small.

Visual examination of Figure 2 suggested that Classes 1, 2 and 4 might be distinguishable from Classes 3 and 5 in terms of the general trend of change. The first three trajectory classes (1, 2, and 4) comprised Christians who were initially either moderate or high in anxiety but were becoming less anxious as they became non-believers. For Class 4 there was an upswing of anxiety, although not to the original level. The latter two (3 and 5) included people who had been either moderate or low in anxiety before faith exit but who experienced an increase in anxiety prior to and during the first 2 years or so of exit, followed by a plateau or slight decrease.

Table 5
Fit Indices of Growth Mixture Models of Anxiety

Model	Entropy	AIC	BIC	ABIC
1-class		5,172.987	5,215.061	5,173.884
2-class	.940	4,945.584	5,023.259	4,947.239
3-class	.923	4,891.563	5,004.838	4,893.977
4-class	.910	4,845.022	4,993.898	4,848.194
5-class	.909	4,826.955	5,011.432	4,830.886
6-class	.894	4,828.325	5,048.403	4,833.015

Note. The model with seven classes did not converge. AIC = Akaike information criteria; BIC = Bayesian information criteria; ABIC = sample-size adjusted BIC.

We then used logistic regression to examine whether we could predict membership in the trajectory Classes 1, 2, and 4 versus Classes 3 and 5 on anxiety. The model including gender, age, the Big Five, values, social axioms, faith maturity, and quality of life as potential predictors was statistically significant, $\chi^2(28, N = 188) = 43.09$, $p = .034$; Cox & Snell $R^2 = .21$. Membership in one of the classes that showed reduction in anxiety initially or even in a longer term could be predicted by initial levels of emotional stability ($b = .62$, $SE = .30$, $p = .039$) and physical health ($b = .34$, $SE = .13$, $p = .009$).

Trajectories of depressive mood were classified using the same method. This yielded a set of results slightly different from that we obtained for anxiety. As can be seen in Table 7 and Figure 3, there were eight classes of trajectories in depressive moods. Five classes of exiters (Classes 2, 3, 5, 7, and 8) reported more depressive moods as time progressed. Two of them (Classes 2 and 3) had a parabolic trend, showing a subsequent reduction in depressive moods. Three other classes (1, 4, and 6) reported an initial reduction of depressive moods, leveling off gradually or even making a slight increase subsequently. MANOVA results showed significant differences among these classes (Wilks's $\Lambda = .25$), $F(147, 985) = 1.55$, $p < .001$, $\eta_p^2 = .18$. As presented in Table 8, subsequent ANOVAs revealed that compared to the classes that experienced initial reduction of depressive moods, the five classes that experienced initial increase in depressive moods had lower
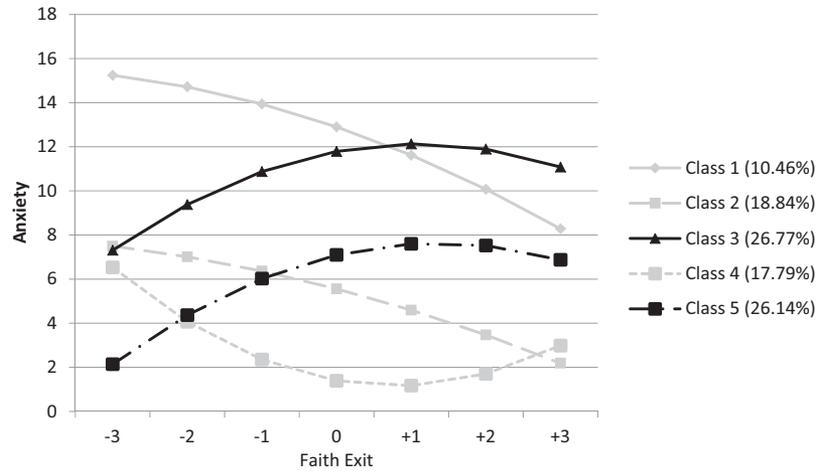
Figure 2. Five classes of anxiety trajectories from three waves before (negative values on the x-axis) to three waves after (positive values on the x-axis) faith exit. Trajectories with an upward trend are in black, while those with a downward trend are in grey. Percentages of exiters falling in each class are shown in parentheses.

preexit quality of life (in physical health, psychological health, social relationship, environment, overall, and overall health). A logistic regression model including gender, age, personality, values, social axioms, faith maturity, and quality of life as potential predictors was statistically significant, $\chi^2(28, N = 188) = 60.39$, $p = .001$; Cox & Snell $R^2 = .28$. Membership in one of the three classes that experienced initial reduction of depressive moods

could be predicted by extraversion ($b = .87$, $SE = .38$, $p = .021$) and psychological health ($b = .57$, $SE = .15$, $p < .001$). Emotional stability was a marginally significant predictor. The results from this analysis echoes with that for the trajectory classes in anxiety, suggesting that an initial reduction of psychological symptoms is associated with the faith exiters' prior level of extraversion and well-being.

Table 6
Comparison of Five Classes of Anxiety Trajectories

Variable	Class 1 ($n = 19$)	Class 2 ($n = 37$)	Class 3 ($n = 52$)	Class 4 ($n = 34$)	Class 5 ($n = 46$)
Age (at faith exit)	23.24$_a$	27.09$_a$	23.8$_a$	25.66$_a$	26.29$_a$
Years converted	6.20$_a$	9.01$_a$	6.45$_a$	10.26$_a$	8.06$_a$
Personality					
Extraversion	2.74$_{abc}$	3.19$_{ab}$	2.73$_c$	3.20$_a$	3.04$_{abc}$
Conscientiousness	3.18$_a$	3.50$_a$	3.21$_a$	3.41$_a$	3.37$_a$
Agreeableness	3.78$_a$	3.82$_a$	3.65$_a$	3.84$_a$	8.85$_a$
Intellect	3.33$_a$	3.47$_a$	3.15$_a$	3.39$_a$	3.46$_a$
Emotional stability	2.48$_a$	3.24$_b$	2.46$_a$	3.38$_b$	3.05$_b$
Faith maturity					
Vertical dimension	3.68$_a$	4.39$_a$	4.04$_a$	4.04$_a$	4.37$_a$
Horizontal dimension	3.30$_a$	3.92$_a$	3.52$_a$	3.65$_a$	3.59$_a$
Quality of life					
Physical health	12.70$_a$	14.47$_b$	13.01$_a$	15.11$_b$	14.37$_b$
Psychological health	10.88$_a$	13.67$_b$	12.08$_a$	14.02$_b$	13.45$_b$
Social relationship	12.24$_a$	13.76$_a$	12.76$_a$	13.86$_a$	13.91$_a$
Environment	11.97$_a$	13.88$_{bc}$	12.85$_{ab}$	14.15$_{cd}$	13.70$_{bd}$
Overall	11.42$_a$	13.92$_{bc}$	12.42$_{ab}$	13.44$_{abd}$	14.30$_{cd}$
Overall health	10.45$_{ac}$	11.66$_{abc}$	10.25$_a$	13.00$_{bd}$	12.22$_{cd}$
Religious practices					
Personal	.74$_{ab}$	1.46$_a$	.65$_b$	.91$_{ab}$	1.30$_{ab}$
Communal	.47$_a$	.78$_a$	.65$_a$	.53$_a$	.85$_a$
Missionary	.58$_a$	.65$_a$	.54$_a$	.52$_a$	.61$_a$
Church experiences					
Attitudes toward church practices	3.19$_a$	3.50$_a$	3.41$_a$	3.30$_a$	3.53$_a$
Ideological fit	2.81$_a$	3.38$_b$	3.11$_{ab}$	3.17$_{ab}$	3.34$_b$
Bonding with other church attendees	2.70$_a$	2.98$_a$	2.84$_a$	2.89$_a$	3.14$_a$

Note. Means sharing the same subscript are not significantly different from each other (Tukey's honestly significant difference, $p < .05$). All variables were measured at the survey before and closest to the faith exit.

Table 7

Fit Indices of Growth Mixture Models of Depressive Mood

Model	Entropy	AIC	BIC	ABIC
1-class		5,670.802	5,712.876	5,671.698
2-class	.932	5,397.368	5,475.043	5,399.023
3-class	.931	5,272.554	5,385.829	5,274.968
4-class	.906	5,250.855	5,399.731	5,254.028
5-class	.899	5,240.788	5,425.265	5,244.720
6-class	.924	5,205.897	5,425.975	5,210.587
7-class	.901	5,235.941	54,91.619	52,41.389
8-class	.886	5,196.676	54,87.956	52,02.883

Note. The model with nine classes did not converge. AIC = Akaike information criteria; BIC = Bayesian information criteria; ABIC = sample-size adjusted BIC.

We conducted the same GMM on the 188 matched stayers' depressive mood scores, for the purposes of comparison. The most remarkable difference between this set of results and the exiters' results was again the relatively lower heterogeneity within the stayer subsample. Specifically, although there were five classes of trajectories of depressive moods in the stayers, one class constituted the majority. This class, making up 74.47% of the subsample, was characterized by low depressive moods remaining low throughout the study period. Two classes that were initially low to moderate in depressive mood, and together making up of 14.37% of the subsample, showed some increase in depressive moods. Two other classes that were initially high in depressive mood and making up 11.17% of the subsample experienced some improvements.

The same set of analyses was repeated on the stayers' and exiters' stress scores. This resulted in similar findings, which can be found in Tables S2, S3, S4 and Figures S1 and S2, all in the online supplemental materials.

Discussion

The primary objective of the present investigation was to understand psychological changes during faith exit. A secondary objective was to identify psychological characteristics of believers who would within a 3-year time frame become disengaged from their faith. To achieve these objectives, rather than comparing the religious with the nonreligious or no longer religious individuals merely cross-sectionally, we took a dynamic approach. To our knowledge, the present study was one of the first quantitative investigations to examine associations between religious disengagement and a wide range of individual-level variables. It used a prospective design to avoid problems of participants' memory distortion.

Psychological Changes

In terms of personality and values, the exiters' changes, if any, were not any different from what would be observed among Christians who stay in the faith. Over time, both stayers and exiters slowly gained some self-enhancement and open-to-change values. The rates of change were the same for both groups. This is not to say, however, that there was no value change concomitant with the faith transition. It is still possible that some changes might have started long before the final disengagement, given that the would-be exiters' initial value profile reflected some nonbelievers' values.

The more noticeable changes were in well-being. Sleep quality improved for exiters but not for stayers. Furthermore, using GMM on longitudinal data from several time points allowed us to examine even the more complex, curvilinear changes in the faith exiters' levels of anxiety and depressive moods. In general, the results indicate that some exiters experienced a reduction of anxiety and depression whereas others experienced an increase in anxiety and depression.

On the basis of this heterogeneity in the consequences of faith exit, we propose a multitrajectory faith transition model. It assumes that as believers disengage from their faith, they may undergo one of several possible trajectories of change in psychological states. The beginning and end states can be different from trajectory to trajectory. For anxiety, there are five classes of change trajectories during faith transition. For depressive mood,
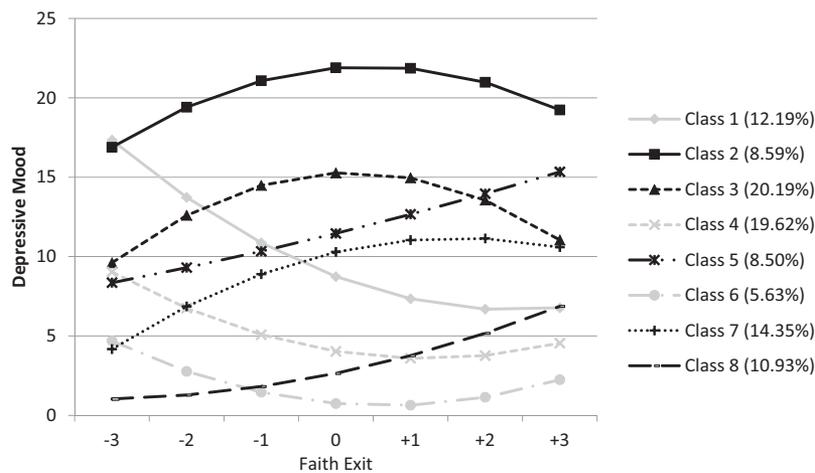

Figure 3. Eight classes of depressive mood trajectories from three waves before (negative values on the x-axis) to three waves after (positive values on the x-axis) faith exit. Trajectories with an upward trend are in black, while those with a downward trend are in grey. Percentages of exiters falling in each class are shown in parentheses.

Table 8

Comparison of Eight Classes of Depressive Mood Trajectories

Variable	Class 1 (n = 23)	Class 2 (n = 14)	Class 3 (n = 37)	Class 4 (n = 35)	Class 5 (n = 18)	Class 6 (n = 11)	Class 7 (n = 28)	Class 8 (n = 22)
Age (at faith exit)	26.96_a	23.14_a	24.70_a	25.20_a	22.31_a	27.37_a	24.91_a	28.41_a
Years converted	7.92_{ab}	5.53_a	7.72_a	8.72_{ac}	4.98_{ad}	9.46_a	5.74_a	13.44_{bcd}
Personality								
Extraversion	3.15_{ac}	2.38_b	2.75_{ab}	3.11_{ad}	2.93_{abe}	3.58_{cdef}	2.93_{abf}	3.79_{af}
Conscientiousness	3.27_{ab}	3.28_{ab}	3.10_a	3.40_a	3.36_a	3.77_b	3.38_a	3.47_a
Agreeableness	3.97_{abc}	3.59_{abc}	3.71_{abc}	3.82_{abc}	3.55_b	4.17_c	3.63_{ab}	3.95_{abc}
Intellect	3.59_{ab}	3.14_{ab}	3.12_{bc}	3.38_{ac}	3.10_{ac}	3.69_{ac}	3.36_{ac}	3.60_a
Emotional stability	2.98_{ac}	2.16_b	2.71_{ab}	2.99_{ac}	2.50_{ab}	3.61_{cd}	3.05_{ade}	3.45_{ce}
Faith maturity								
Vertical dimension	3.99_a	3.57_a	4.09_a	4.21_a	4.33_a	4.70_a	3.83_a	4.70_a
Horizontal dimension	3.64_a	3.52_a	3.59_a	3.62_a	3.43_a	4.03_a	3.46_a	3.81_a
Quality of life								
Physical health	14.45_{acd}	12.39_{bc}	13.10_{abc}	14.30_{ae}	15.58_{ab}	16.24_d	13.40_{ab}	15.36_{de}
Psychological health	13.44_{ac}	9.81_e	11.55_b	14.01_a	12.32_{bc}	15.91_d	12.42_{bc}	14.90_{ad}
Social relationship	13.58_{ab}	11.44_a	12.89_{ab}	14.01_{bc}	12.17_{ac}	15.52_{bd}	12.80_{acde}	14.98_{be}
Environment	13.14_{ab}	11.62_a	12.97_a	14.03_b	13.33_a	14.66_b	12.91_a	14.65_b
Overall	13.53_{ac}	11.16_{ab}	11.39_{bd}	14.37_{ce}	12.53_{adef}	14.79_{cfg}	13.43_{aeg}	15.29_{cg}
Overall health	11.51_{ab}	9.47_a	10.80_a	11.90_{ab}	11.41_{ab}	14.54_b	10.64_a	13.78_b
Religious practices								
Personal	$.89_{ab}$	$.79_{ab}$	$.95_{ab}$	$.80_a$	$.83_{ab}$	1.45_{ab}	1.00_{ab}	1.82_b
Communal	$.57_a$	$.57_a$	$.68_a$	$.46_a$	$.89_a$	1.00_a	$.61_a$	1.05_a
Missionary	$.70_a$	$.29_a$	$.57_a$	$.46_a$	$.72_a$	$.73_a$	$.54_a$	$.86_a$
Church experiences								
Attitudes toward church practices	3.20_a	3.37_a	3.32_a	3.49_a	3.49_a	3.67_a	3.39_a	3.69_a
Ideological fit	3.01_a	2.91_a	3.05_a	3.31_a	3.42_a	3.23_a	3.24_a	3.39_a
Bonding with other church attendees	2.86_a	2.71_a	2.87_a	3.03_a	2.77_a	3.24_a	2.88_a	3.19_a

Note. Means sharing the same subscript are not significantly different from each other (Tukey's honestly significant difference, $p < .05$). All variables were measured at the survey before and closest to the faith exit.

there are eight. (It is important to note that the numbers could be dependent on the sample used.)

Baseline personality trait and wellness can be determinants of the kind of changes in psychological symptoms one would go through during faith exit. Specifically, extraversion, emotional stability, and good quality of life (physical health) are predictors of membership in one of the three trajectory classes (1, 2, and 4) that showed a decline in anxiety. Furthermore, of the disengaging Christians originally moderate on anxiety, those who experienced an early increase in anxiety (Class 3) were more likely to have had reported lower quality of life (including physical health, psychological health, satisfaction with the environment, overall quality of life, and overall health) and poorer sleep quality than did those who experienced a reduction in anxiety (Classes 2 and 4). A similar pattern applied for the depressive mood trajectories. For some believers, becoming a nonbeliever was an intense experience that required a lot of psychological resources. Our findings suggest that poor physical and psychological health manifested as a risk factor for increase in anxiety postexit. For those people who had adequate psychological resources, faith exit could result in growth; for those people who were already lacking in psychological resources, faith exit brought further depletion.

This discussion has an important theoretical implication on the psychological consequences of religious disengagement. It is not surprising that on the one hand, supporters of religion would lament a fellow believer's leaving their faith and anticipate the exit as opening the door to future purposelessness and psychological unrest, and on the other hand, opponents of religion claim that once the bondage to religion is shattered one would find true freedom and happiness. However, the real picture is not that simple. Whereas most stayers reported lower levels of depression and anxiety during the same time frame, exiters showed more variation among themselves in depression and anxiety trajectories. Specifically, about half of the exiters experienced a deterioration in anxiety and depressive mood during the 1 or 2 years before and after the exit, whereas for the others it was just the opposite. Hence, any theory asserting that all faith exiters change in the same way should be viewed with suspicion. Religious disengagement does not reduce anxiety for all faith exiters; however, a reduction does occur for some people. The anxiety reduction hypothesis is thus valid for those people. In contrast to the findings from a recent prospective study that nonbelievers *converting to* Christianity experienced improvement in psychological symptoms (Hui et al., 2017), the current study suggests that only some believers *converting out of* this religion improve, whereas others do not. Seen in this light, the psychological implications of faith exit appear more variable than are the implications of religious conversion. The process of faith exit should not be regarded as psychologically similar to or merely a reversal of religious conversion.

Furthermore, the multitrajectory finding is partly consistent with the set-point theory, which would predict that the exiters' change in anxiety and depressive moods would last for a limited time, after which the level would return to the baseline. There is some indication of that trend for Classes 3, 4, and 5 in Figure 2 and for Classes 2, 3, 4, and 6 in Figure 3. However, for at least some of these classes, the recovery was not complete and hence was not

supportive of the theory. Future research with a longer time frame should address questions such as how long the change in psychological symptoms would last and whether they are only transitory for some people (Headey, 2008).

Precursors of Faith Exit

Compared to Christians who stay in the faith, those who later self-identified as non-Christians were lower on emotional stability. In this way the would-be exiters were more similar to the nonbelievers than the believers. Yet no difference could be found on agreeableness and conscientiousness, two personality traits that have in the past distinguished the religious from the less religious (Saroglou, 2010). This implies that the difference on the latter two personality traits that some researchers reported, if reliable, is not an antecedent but a consequence of faith engagement versus disengagement. Considering that personality change was not observed in either religious conversion (Hui et al., 2017; Paloutzian, 2014) or faith exit (this article) within a time frame of 2–3 years, the best explanation of differences in personality profile reported in the literature would be that personality change occurs over a much longer period subsequent to religious conversion and, in the present case, religious disengagement.

Prior differences between the exiters and stayers on certain social axioms and values are also informative. Compared to those Christians who stayed in the faith, the would-be exiters had less trust in other people (high social cynicism) and stronger belief in fate control. This mirrors the difference between the non-Christians and the Christians reported by Safdar, Lewis, Greenglass, and Daneshpour (2009). In terms of values, although they were still professing their Christian faith, the would-be exiters put less emphasis on conformity, tradition, and benevolence (values that have been espoused by many Christians) and more on self-direction, stimulation, hedonism, achievement, and power. All in all, the would-be exiters already had a belief and value profile that mimicked more the nonbelievers than the believers. These psychological characteristics, such as valuing opportunities to make up one's own mind without having to follow others, have become a fertile ground for breeding the believers' discontent and subsequent departure. This is because these beliefs and values may not align with what are most often taught in the religious communities. Presence of initial differences in these beliefs and values may also imply that the process of exit has begun long before the Christians identify themselves as a nonbeliever or believer in another religion. The change might have occurred very early and before the faith exit.

The differences between the stayers and the would-be exiters at baseline on psychological symptoms in the present study were weak and statistically nonsignificant. This does not fully agree with Ullman's (1982) findings from a retrospective study that emotional turmoil usually preceded conversion to another religion and Maselko and Buka's (2008) notion that the struggle with religious identity precipitates chronic anxiety.

However, the observation of no difference could be due to our having initially grouped all faith exiters into the one category. This procedure may have diminished our ability to tap the complexity that exists in how religious disaffiliation is related to various psychological symptoms. The relationship is more nuanced. In some of the would-be exiters (Classes 1, 2, and 4), a moderate to high level of anxiety was observed prior to the disengagement. Emotional turmoil may or may not have preceded religious disaffiliation.

What is common between the findings from this study and those of previous research is that value priorities are useful predictors of faith exit. Hui et al.'s (2015) study suggested that placing emphasis on the values of self-direction, stimulation, and power is an early sign of faith exit within the next year or so. The present study corroborates this notion. Brañas-Garza et al. (2013) observed that deconverts were more liberal in their attitudes regarding sex. In parallel, the present study shows that faith exit is predicted by the values of self-direction, stimulation, hedonism, achievement, and power, many of which researchers such as Beckers, Siegers, and Kuntz (2012) and Guerra, Gouveia, Sousa, Lima, and Freires (2012) have found to be related to liberal sex attitudes.

Long-term predictors of faith exit may be somewhat different from immediate predictors, but self-enhancement values are clearly a mark of the Chinese who will most likely disengage from their Protestant faith, which often embraces self-sacrifice and humility. This value discrepancy could be the result of a gradual change in values due to exposure to a secular environment such as the university campus. It could also be because these individuals did not adopt Christian values very much after their conversion. This is a topic for a follow-up inquiry.

Limitations and Future Directions

Some measures (e.g., the PSQI and religious practices) were only moderate in their reliability. This might have attenuated the correlations of these variables with other variables (Hunter & Schmidt, 2015; Spearman, 1904). Future studies can use measures with higher reliability to avoid underestimating the effects. Another limitation of this study is that we were not able to understand the psychological processes shortly before the exiters' disengagement. Fortunately, our design allowed us to survey these individuals at several time points, using multiple imputation to extrapolate where data were missing. Using this approach, the present study contributes to the literature by identifying different classes of trajectories of anxiety and depressive mood as people leave their faith. Along this line of inquiry, future researchers should differentiate among classes of trajectories of personality and value changes as people go through their faith transitions.

Indeed, religious believers who leave their faith do so in many different ways. Some develop a secular identity suddenly. Others explore alternative worldviews as doubts and alienation slowly build up or as their social network changes. In our study we did not distinguish among these individuals. Future studies should investigate the underlying processes and mechanisms. These may help to explain why faith exit is linked to positive psychological outcomes for some people but negative outcomes for others.

The generalizability of our findings should be ascertained in future studies. Whereas most Chinese Protestants converted from Chinese folk religion or no religion at all, a substantial proportion of believers in the United States have been brought up in a Judeo-Christian environment. A cross-cultural comparison, although difficult to conduct, would be valuable.

Conclusion

To conclude, two points are noteworthy. First, faith exit is a process preceded and followed by some changes in personality and values. Would-be exiters share some common dispositional characteristics. Second, changes in psychological well-being are not identical for all faith exiters. Yet neither is every exiter's experience unique, despite the numerous reasons and unique personal circumstances that lead to religious doubt and precipitate departure. The present study demonstrates a multitrajectory model revealing that there are definable clusters of people. For some, leaving the religion is psychologically beneficial; for others, leaving the religion has just the opposite consequence.

References

Altemeyer, B., & Hunsberger, B. E. (1997). *Amazing conversions: Why some turn to faith and others abandon religion*. Amherst, NY: Prometheus Books.

Astin, A. W., Astin, H. S., & Lindholm, J. A. (2011). *Cultivating the spirit: How college can enhance students' inner lives*. San Francisco, CA: Jossey-Bass.

Beckers, T., Siegers, P., & Kuntz, A. (2012). Congruence and performance of value concepts in social research. *Survey Research Methods, 6,* 13–24.

Benson, P. L., Donahue, M. J., & Erickson, J. A. (1993). The Faith Maturity Scale: Conceptualization, measurement, and empirical validation. *Research in the Social Scientific Study of Religion, 5,* 1–26.

Brañas-Garza, P., García-Muñoz, T., & Neuman, S. (2013). Determinants of disaffiliation: An international study. *Religions, 4,* 166–185. http://dx.doi.org/10.3390/rel4010166

Brinkerhoff, M. B., & Mackie, M. M. (1993). Casting off the bonds of organized religion: A religious-careers approach to the study of apostasy. *Review of Religious Research, 34,* 235–258. http://dx.doi.org/10.2307/3700597

Bullivant, S. C. (2015). Believing to belong: Non-religious belief as a path to inclusion. In L. G. Beaman & S. Tomlins (Eds.), *Atheist identities—Spaces and social contexts* (pp. 101–115). http://dx.doi.org/10.1007/978-3-319-09602-5_7

Buysse, D. J., Reynolds, C. F., III, Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. *Psychiatry Research, 28,* 193–213. http://dx.doi.org/10.1016/0165-1781(89)90047-4

Cragun, R. T., & Hammer, J. H. (2011). "One person's apostate is another person's convert": What terminology tells us about pro-religious hegemony in the sociology of religion. *Humanity & Society, 35,* 149–175. http://dx.doi.org/10.1177/0160597611035001007

Ebaugh, H. R. F. (1988). Leaving Catholic convents: Toward a theory of disengagement. In D. G. Bromley (Ed.), *Falling from the faith: Causes and consequences of religious apostasy* (pp. 100–121). Newbury Park, CA: Sage.

Galen, L. (2015). Atheism, wellbeing, and the wager: Why not believing in God (with others) is good for you. *Science, Religion and Culture, 2,* 54–69. http://dx.doi.org/10.17582/journal.src/2015/2.3.54.69

Galen, L. W., & Kloet, J. D. (2011a). Mental well-being in the religious and the non-religious: Evidence for a curvilinear relationship. *Mental Health, Religion & Culture, 14,* 673–689. http://dx.doi.org/10.1080/13674676.2010.510829

Galen, L. W., & Kloet, J. (2011b). Personality and social integration factors distinguishing nonreligious from religious groups: The importance of controlling for attendance and demographics. *Archive for the Psychology of Religions, 33,* 205–228. http://dx.doi.org/10.1163/157361211X570047

Glass, J. L., Sutton, A., & Fitzgerald, S. T. (2015). Leaving the faith: How religious switching changes pathways to adulthood among conservative Protestant youth. *Social Currents, 2,* 126–143. http://dx.doi.org/10.1177/2329496515579764

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality, 40,* 84–96. http://dx.doi.org/10.1016/j.jrp.2005.08.007

Guerra, V. M., Gouveia, V. V., Sousa, D. M., Lima, T. J., & Freires, L. A. (2012). Sexual liberalism-conservatism: The effect of human values, gender, and previous sexual experience. *Archives of Sexual Behavior, 41,* 1027–1039. http://dx.doi.org/10.1007/s10508-012-9936-4

Headey, B. (2008). Life goals matter to happiness: A revision of set-point theory. *Social Indicators Research, 86,* 213–231. http://dx.doi.org/10.1007/s11205-007-9138-y

Ho, R. T. H., & Fong, T. C. T. (2014). Factor structure of the Chinese version of the Pittsburgh Sleep Quality Index in breast cancer patients. *Sleep Medicine, 15,* 565–569. http://dx.doi.org/10.1016/j.sleep.2013.10.019

Hui, C. H., Cheung, S.-H., Lam, J., Lau, E. Y. Y., Yuliawati, L., & Cheung, S.-F. (2017). In search of the psychological antecedents and consequences of Christian conversion: A three-year prospective study. *Psychology of Religion and Spirituality, 9,* 220–230. http://dx.doi.org/10.1037/rel0000082

Hui, C. H., Lau, E. Y. Y., Lam, J., Cheung, S.-F., & Lau, W. W. F. (2015). Psychological predictors of Chinese Christians' church attendance and religious steadfastness: A three-wave prospective study. *Psychology of Religion and Spirituality, 7,* 250–264. http://dx.doi.org/10.1037/a0039216

Hui, C. H., Ng, E. C. W., Mok, D. S. Y., Lau, E. Y. Y., & Cheung, S.-F. (2011). "Faith Maturity Scale" for Chinese: A revision and construct validation. *International Journal for the Psychology of Religion, 21,* 308–322. http://dx.doi.org/10.1080/10508619.2011.607417

Hui, C. H., Pak, S. T., & Cheng, K. H. C. (2009). Validation studies of a measure of overall managerial readiness for the Chinese. *International Journal of Selection and Assessment, 17,* 127–141. http://dx.doi.org/10.1111/j.1468-2389.2009.00457.x

Hunsberger, B. E. (1983). Apostasy: A social learning perspective. *Review of Religious Research, 25,* 21–38. http://dx.doi.org/10.2307/3511309

Hunter, J. E., & Schmidt, F. L. (2015). *Methods of meta-analysis: Correcting error and bias in research findings* (3rd ed.). Thousand Oaks, CA: Sage.

Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry, 2012:* 278730. http://dx.doi.org/10.5402/2012/278730

Lau, E. Y. Y., Hui, C. H., Cheung, S.-F., & Lam, J. (2015). Bidirectional relationship between sleep and optimism with depressive mood as a mediator: A longitudinal study of Chinese working adults. *Journal of Psychosomatic Research, 79,* 428–434.

LeDrew, S. (2013). Discovering atheism: Heterogeneity in trajectories to atheist identity and activism. *Sociology of Religion, 74,* 431–453. http://dx.doi.org/10.1093/socrel/srt014

Lee, M. H. (2015). *From faith and advocacy to unbelief and defection: Exploring the concomitants and consequences of deconversion among evangelical ministers and missionaries*. Unpublished doctoral dissertation, Trinity International University, Deerfield, IL.

Leung, K., & Bond, M. H. (2004). Social axioms: A model for social beliefs in multicultural perspective. In P. Z. Mark (Ed.), *Advances in experimental social psychology* (Vol. 36, pp. 119–197). http://dx.doi.org/10.1016/S0065-2601(04)36003-X

Leung, K., Bond, M. H., de Carrasquel, S. R., Muñoz, C., Hernández, M., Murakami, F., . . . Singelis, T. M. (2002). Social axioms: The search for universal dimensions of general beliefs about how the world functions. *Journal of Cross-Cultural Psychology, 33,* 286–302. http://dx.doi.org/10.1177/0022022102033003005

Leung, K. F., Tay, M., Cheng, S., & Lin, F. (1997). *Hong Kong Chinese version World Health Organisation Quality of Life—Abbreviated version*. Hong Kong: Hospital Authority.

Leung, K. F., Wong, W. W., Tay, M. S. M., Chu, M. M. L., & Ng, S. S. W. (2005). Development and validation of the interview version of the Hong Kong Chinese WHOQOL-BREF. *Quality of Life Research, 14,* 1413–1419. http://dx.doi.org/10.1007/s11136-004-4772-1

Lin, T. H., & Dayton, C. M. (1997). Model selection information criteria for non-nested latent class models. *Journal of Educational and Behavioral Statistics, 22,* 249–264. http://dx.doi.org/10.3102/10769986022003249

Longo, G. S., & Kim-Spoon, J. (2014). What drives apostates and converters? The social and familial antecedents of religious change among adolescents. *Psychology of Religion and Spirituality, 6,* 284–291. http://dx.doi.org/10.1037/a0037651

Loveland, M. T. (2003). Religious switching: Preference development, maintenance, and change. *Journal for the Scientific Study of Religion, 42,* 147–157. http://dx.doi.org/10.1111/1468-5906.00168

Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales* (2nd ed.). Sydney, New South Wales, Australia: Psychology Foundation.

Lykken, D. T. (1999). *Happiness: What studies on twins show us about nature, nurture and the happiness setpoint.* New York, NY: Golden Books.

Maselko, J., & Buka, S. (2008). Religious activity and lifetime prevalence of psychiatric disorder. *Social Psychiatry and Psychiatric Epidemiology, 43,* 18–24. http://dx.doi.org/10.1007/s00127-007-0271-3

McCullough, M. E., Enders, C. K., Brion, S. L., & Jain, A. R. (2005). The varieties of religious development in adulthood: A longitudinal investigation of religion and rational choice. *Journal of Personality and Social Psychology, 89,* 78–89. http://dx.doi.org/10.1037/0022-3514.89.1.78

Merino, S. M. (2012). Irreligious socialization? The adult religious preferences of individuals raised with no religion. *Secularism & Nonreligion, 1,* 1–16. http://dx.doi.org/10.5334/snr.aa

Moussa, M. T., Lovibond, P. F., & Laube, R. (2001). *Psychometric properties of a Chinese version of the short Depression Anxiety Stress Scales (DASS21).* Report for New South Wales Transcultural Mental Health Centre, Cumberland Hospital, Sydney. Retrieved from http://www2.psy.unsw.edu.au/dass/Chinese/tmhc.htm

Muthén, L. K., & Muthén, B. O. (1998–2015). *Mplus user's guide* (7th ed.). Los Angeles, CA: Author.

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling. A Monte Carlo simulation study. *Structural Equation Modeling, 14,* 535–569. http://dx.doi.org/10.1080/10705510701575396

Paloutzian, R. F. (2014). Psychology of religious conversion and spiritual transformation. In L. R. Rambo & C. E. Farhadian (Eds.), *The Oxford handbook of religious conversion* (pp. 209–239). New York, NY: Oxford University Press.

Park, C. L. (2005). Religion as a meaning-making framework in coping with life stress. *Journal of Social Issues, 61,* 707–729. http://dx.doi.org/10.1111/j.1540-4560.2005.00428.x

Regnerus, M. D., & Uecker, J. E. (2006). Finding faith, losing faith: The prevalence and context of religious transformations during adolescence. *Review of Religious Research, 47,* 217–237.

Rener-Sitar, K., John, M. T., Bandyopadhyay, D., Howell, M. J., & Schiffman, E. L. (2014). Exploration of dimensionality and psychometric properties of the Pittsburgh Sleep Quality Index in cases with temporomandibular disorders. *Health and Quality of Life Outcomes, 12,* 10. http://dx.doi.org/10.1186/1477-7525-12-10

Safdar, S., Lewis, J. R., Greenglass, E., & Daneshpour, M. (2009). An examination of proactive coping and social beliefs among Christians and Muslims. In K. Leung & M. H. Bond (Eds.), *Psychological aspects of social axioms: Understanding global belief systems* (1st ed., pp. 177–196). http://dx.doi.org/10.1007/978-0-387-09810-4_11

Saroglou, V. (2002). Religion and the five factors of personality: A meta-analytic review. *Personality and Individual Differences, 32,* 15–25. http://dx.doi.org/10.1016/S0191-8869(00)00233-6

Saroglou, V. (2010). Religiousness as a cultural adaptation of basic traits: A five-factor model perspective. *Personality and Social Psychology Review, 14,* 108–125. http://dx.doi.org/10.1177/1088868309352322

Saroglou, V., Delpierre, V., & Dernelle, R. (2004). Values and religiosity: A meta-analysis of studies using Schwartz's model. *Personality and Individual Differences, 37,* 721–734. http://dx.doi.org/10.1016/j.paid.2003.10.005

Saroglou, V., & Muñoz-García, A. (2008). Individual differences in religion and spirituality: An issue of personality traits and/or values. *Journal for the Scientific Study of Religion, 47,* 83–101. http://dx.doi.org/10.1111/j.1468-5906.2008.00393.x

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1–65). http://dx.doi.org/10.1016/S0065-2601(08)60281-6

Schwartz, S. H. (1996). Value priorities and behavior: Applying a theory of integrated value systems. In C. Seligman, J. M. Olson, & M. P. Zanna (Eds.), *The psychology of values: The Ontario Symposium* (Vol. 8, pp. 1–24). Hillsdale, NJ: Erlbaum.

Schwartz, S. H., & Rubel, T. (2005). Sex differences in value priorities: Cross-cultural and multimethod studies. *Journal of Personality and Social Psychology, 89,* 1010–1028. http://dx.doi.org/10.1037/0022-3514.89.6.1010

Smith, C., & Denton, M. L. (2005). *Soul searching: The religious and spiritual lives of American teenagers.* http://dx.doi.org/10.1093/019518095X.001.0001

Smith, J. M. (2011). Becoming an atheist in America: Constructing identity and meaning from the rejection of theism. *Sociology of Religion, 72,* 215–237. http://dx.doi.org/10.1093/socrel/srq082

Smith, T. B., McCullough, M. E., & Poll, J. (2003). Religiousness and depression: Evidence for a main effect and the moderating influence of stressful life events. *Psychological Bulletin, 129,* 614–636. http://dx.doi.org/10.1037/0033-2909.129.4.614

Spearman, C. (1904). The proof and measurement of association between two things. *Psychological Bulletin, 15,* 72–101.

Streib, H. (2014). Deconversion. In L. R. Rambo & C. E. Farhadian (Eds.), *The Oxford handbook on religious conversion* (pp. 271–296). Oxford, United Kingdom: Oxford University Press.

Streib, H., Hood, R. W., Jr., Keller, B., Csöff, R.-M., & Silver, C. F. (2009). *Deconversion: Qualitative and quantitative results from cross-cultural research in Germany and the United States of America.* Göttingen, Germany: Vandenhoech & Ruprecht.

Streib, H., & Keller, B. (2004). The variety of deconversion experiences: Contours of a concept in respect to empirical research. *Archive for the Psychology of Religion, 26,* 181–200. http://dx.doi.org/10.1163/0084672053598030

Suh, D., & Russell, R. (2015). Non-affiliation, non-denominationalism, religious switching, and denominational switching: Longitudinal analysis of the effects on religiosity. *Review of Religious Research, 57,* 25–41. http://dx.doi.org/10.1007/s13644-014-0197-7

Taylor, A., & MacDonald, D. A. (1999). Religion and the five factor model of personality: An exploratory investigation using a Canadian university sample. *Personality and Individual Differences, 27,* 1243–1259.

Tsai, P.-S., Wang, S.-Y., Wang, M.-Y., Su, C.-T., Yang, T.-T., Huang, C.-J., & Fang, S.-C. (2005). Psychometric evaluation of the Chinese version of the Pittsburgh Sleep Quality Index (CPSQI) in primary insomnia and control subjects. *Quality of Life Research, 14,* 1943–1952. http://dx.doi.org/10.1007/s11136-005-4346-x

Uecker, J. E., Regnerus, M. D., & Vaaler, M. L. (2007). Losing my religion: The social sources of religious decline in early adulthood. *Social Forces, 85,* 1667–1692. http://dx.doi.org/10.1353/sof.2007.0083

Ullman, C. (1982). Cognitive and emotional antecedents of religious conversion. *Journal of Personality and Social Psychology, 43,* 183–192. http://dx.doi.org/10.1037/0022-3514.43.1.183

Vargas, N. (2012). Retrospective accounts of religious disaffiliation in the United States: Stressors, skepticism, and political factors. *Sociology of Religion, 73,* 200–223. http://dx.doi.org/10.1093/socrel/srr044

Wong, J. G. W. S., Cheung, E. P. T., Chan, K. K. C., Ma, K. K. M., & Tang, S. W. (2006). Web-based survey of depression, anxiety and stress in first-year tertiary education students in Hong Kong. *Australian and New Zealand Journal of Psychiatry, 40,* 777–782. http://dx.doi.org/10.1080/j.1440-1614.2006.01883.x

Zhang, K. C., Hui, C. H., Lam, J., Lau, E. Y. Y., Cheung, S. F., & Mok, D. S. Y. (2014). Personal spiritual values and quality of life: Evidence from Chinese college students. *Journal of Religion and Health, 53,* 986–1002. http://dx.doi.org/10.1007/s10943-013-9686-1

Zhou, F., Leung, K., & Bond, M. H. (2009). Social axioms and achievement across cultures: The influence of reward for application and fate control. *Learning and Individual Differences, 19,* 366–371. http://dx.doi.org/10.1016/j.lindif.2008.11.002

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