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Longitudinal Profiles of Eudaimonic Well-Being in Asian American Adolescents

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Abstract

Objectives—The current study explores whether a well-known model (i.e., Ryff's conceptualization of psychological functioning) can be used to examine patterns of eudaimonic well-being among Asian American, who are rarely the focus of systematic investigations in positive psychology.

Methods—Hidden Markov Modeling, a form of Latent Transition Analysis, was used to analyze longitudinal data from adolescents (N = 180; 49% female; 75% U.S.-born).

Results—After establishing measurement validity, analyses revealed four profiles of well-being: Flourishing (consistently high on all well-being dimensions), Functioning (consistently moderate), Hindered (consistently low), and Self-Driven Success (high on most dimensions, but moderate levels of positive relationships). The Functioning profile was the most prevalent, followed by relatively even distributions of the remaining profiles. Profiles substantially shifted from year to year, with the Functioning and Hindered groups exhibiting the most stability. Profiles reflecting more positive well-being (i.e., Flourishing, Self-Driven) were associated with ethnic and American centrality and regard, and interactive effects suggest compounding benefits of these identities.

Conclusions—Psychological models of well-being appear malleable, and cultural identity can contribute to such fluctuations. Results also support the utility of a profile approach to continue examining qualities of positive well-being among Asian American youth.

Keywords

Psychological well-being; longitudinal; Markov modeling; ethnic and American identity

With the notion that health is not the mere absence of disease, but rather the presence of something positive (World Health Organization, 1948), theory and research within the purview of positive psychology have exploded in recent decades. However, knowledge remains limited in several primary ways. First, the topics that typically fall under the theme of positive psychology (e.g., happiness, subjective well-being) are most commonly studied among convenience samples of predominantly white racial majority participants. Less often

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targeted are immigrant or minority groups, such as the rapidly growing segment of the U.S. population with Asian heritage backgrounds whose rates of increase surpass all other ethnic groups including Latin Americans (U.S. Census, 2011). Indeed, the *Asian American Journal of Psychology* recently put forth a call for papers for a Special Issue that zeroes in on "Asian Americans and Positive Psychology", which represents a timely and much-needed initiative to learn more about whether and how current models of positive psychology might apply to Asian Americans. Second, although some specific constructs within the field have targeted youth (e.g., youth purpose, positive youth development), the majority of research on positive psychology has tended to focus on college students and adults, and little work has examined changes in well-being constructs over the critical developmental period of adolescence.

The goal of the current study was to address both of these literature gaps by using a model of positive psychological functioning (i.e., Ryff's subjective well-being scales)—well-known and used among many samples, but to our knowledge never longitudinally measured or validated among Asian American adolescents—to examine how indicators of eudaimonic well-being take shape among this understudied demographic. Our approach first tests the factor structure of Ryff's measure, and then uses a within-person approach to identify profiles of well-being. We also explore how profiles change over time and are related to the co-construction of ethnic and American identity, which is particularly salient as adolescents undergo the process of identity formation. A better understanding of how different dimensions of well-being converge and are potentially predicted by identity development, can provide insight into how well-being and positive adjustment can be best promoted for Asian American youth.

Ryff's Model of Eudaimonic Well-Being

Although the precise concept and operationalization of well-being is sure to vary across cultural backgrounds and worldviews, much of its theoretical underpinnings and foundational work have been conducted within a Western cultural framework (Diener, 2000). For example, the concept of well-being is often traced to the Ancient Greeks who philosophized about the meaning of happiness and individuals' quest towards self-actualization (Ryff, 2014). With these early roots comes the differentiation between hedonic and eudaimonic well-being (Waterman, 1993). The hedonic tradition has a longer history and focuses on life satisfaction, positive affect, and the pursuit of happiness (Diener, 2000). In contrast, eudaimonic perspectives suggest that well-being stems from an existential pursuit of a deep realization and optimization of one's self and overall potential (Ryan & Deci, 2001). Drawing on Aristotle's formulations of eudaimonia, well-being is often considered the highest of human goods, determined by processes of meaningfulness, self-realization, and "activities in the soul that are in accord with virtue, which Aristotle elaborated to mean striving to achieve the best that is within us" (p. 11; Ryff, 2014).

Many contemporary models of psychological well-being emphasize the eudaimonic view. Diverse frameworks have been discussed within these broad principles (e.g., self-determination theory, ontological well-being), and one of the most common and long-standing is Ryff's model of psychological functioning. Inspired by multiple disciplines within philosophy and humanistic (e.g., Rogers, Maslow), existential (e.g., Jung),

developmental (e.g., Erikson, Buhler, Neugarten), and clinical (e.g., Jahoda) psychology, the model is comprised of six factors (Ryff, 2014). *Self-Acceptance* refers to the acceptance of both good and bad aspects of the self, as well as an overall positive self-evaluation. *Autonomy* is characterized by having an independent, internal, and self-focused individuation, and being resistant to social and external pressures. *Personal Growth* reflects ongoing growth of one's potential, and reflects one's ability to expand and change. *Environmental Mastery* is the ability to choose, create, manage, and optimize one's environment, and includes a sense of competence in controlling one's life and contexts. *Positive Relations with Others* reflects the presence of and ability to engage in close, high quality relationships, measured generally as well as with respect to family, peers, and other individuals in one's life. *Purpose in Life* is defined by purpose, direction, intentionality, or meaning.

While inter-related, factor analyses have suggested that these dimensions of well-being are best considered as separate subscales, at least among Western adult samples from which much of the existing work has been based (Ryff & Keyes, 1995). Indeed, despite its reputation as a standard, and presumably universal, assessment of functioning, there are crucial, unexplored cultural and developmental questions related to its use. The current study addresses some of these unanswered questions by examining the factor structure of Ryff's model, change over time, and correlates with other aspects of development (e.g., cultural identity) in the context of longitudinal data collected from a sample of understudied Asian American adolescents.

Cultural Relevance to Asian Americans

Ryff's well-being scales have been translated into 30 languages (Ryff, 2014), and different aspects of its cultural variation have been examined in national and international samples, including those of Asian descent (e.g. Cheng & Chan, 2005; Kitamura et al., 2004; Ryff & Singer, 2006). However, one major caveat is that, for the most part, such prior research has tended to focus on mean level cultural differences in responses rather than on a deeper examination of whether the scales are applicable to diverse individuals to begin with. Moreover, much of the work has centered on broad demarcations based on individualism and collectivism or cross-national comparisons between Asian and American samples (Diener, 2000; Diener, Suh, Lucas, & Smith, 1999), and findings have not been consistent in that Asian samples have been found to report greater, lower, or equal levels of well-being depending on the particular subscales in question (e.g., Karasawa, Curhan, Markus, Kitayama, Love, Radler, & Ryff, 2011; Mohammed, Unher, & Sugawara, 2010; Ryff & Singer, 1998). Collectively, while this existing literature is informative, there is utility in moving beyond sweeping group differences towards a more culturally-focused and systematic investigation of the applicability and development of well-being constructs among Asian American youth.

From a general conceptual standpoint, well-being is salient to not only Ancient Greeks, but also to Eastern traditions (Diener & Suh, 2000). Buddhism has been long concerned with the meaning and definition of happiness and well-being (Bodhi, 2013). Concepts of health, spirituality, and personal transformation are also steeped in Asian traditions of

Confucianism, Taoism, and Hinduism, with some models emphasizing a well-being framework that holistically incorporates the body, spirit, as well as the mind (Chan, Ying Ho, & Chow, 2002; Ng, Yau, Chan, Chan, & Ho, 2005). Yet, the models of well-being that are primarily studied in the field, such as Ryff's, tend to stem from Western philosophies and viewpoints. One empirical question, therefore, is whether such models even apply to individuals with non-Western ancestry.

On the one hand, each of the six factors that were originally proposed by Ryff can be seen as relevant to Asian Americans. For instance, although the self is a cultural construction and definitional differences might vary, Self-Acceptance is highly meaningful across both Western and Eastern worldviews (Harter, 1999). Autonomy can be relevant to Asian Americans as they develop in a Westernized context that emphasizes such values. Although other examples of the applicability of these subscales can be discussed, it is also important to consider the unique ways in which Asian Americans might view these dimensions of well-being differently. For example, Personal Growth might be particularly salient given Asian Americans' immigrant status and their possible personal and family goals to achieve mobility and success (Portes & Rumbaut, 2006). Drawing on acculturation work (Berry, 2003), Environmental Mastery might be particularly strongly tied to the way in which Asian Americans effectively manage multiple cultural contexts. Positive Relationships are also relevant to acculturation in terms of the ability to interact with peers from diverse cultural backgrounds. Purpose in Life can be derived from the culturally-relevant attitude towards family obligation or assistance, which is commonly expected and socialized among Asian immigrant youth (Kiang & Fuligni, 2010). Taken together, these individual subscales of well-being can be seen as both directly relevant, as well as uniquely embedded in the specific cultural contexts in which Asian Americans develop.

It is also possible that the overall way in which multiple well-being dimensions converge varies by culture. While Autonomy and Positive Relationships might be viewed as distinct from Western perspectives, perhaps they are not as strongly differentiated for Asian Americans. Recent work has indeed found that these constructs are highly intertwined among Asian American youth. That is, a salient developmental task for Asian American adolescents is to navigate the acculturative balance between adopting prominent mainstream values around autonomy and independence while also maintaining close connections with others, which is more reflective of heritage cultural values (Bhattacharjee & Kiang, 2014).

Hence, one first step in better understanding the structure and development of well-being among Asian Americans is to examine whether existing models, typically designed and normed with non-Asian samples, are culturally and conceptually appropriate. Led by recommendations from Yoshikawa, Mistry, and Wang (2016), we explore the applicability of Ryff's well-being model to Asian Americans by examining its measurement properties. Although an in-depth, formal test of the psychometric characteristics of Ryff's measure is regrettably beyond the scope of the present study (e.g., we do not have a comparison group with which to fully explore measurement equivalence), our approach can provide some initial knowledge regarding this important issue. Our exploration of the applicability of this established model to Asian Americans further extends the literature by examining the structure and stability of well-being over the developmental period of adolescence, a time

when both psychological adjustment and cultural identity formation are especially salient and worthwhile of inquiry.

Developmental Considerations

In light of the prolific amount of research that has used Ryff's measure, it is worth noting that the bulk of it has focused on adult samples. Moreover, research that has considered age-related effects has largely been cross-sectional (Ryff, 2013; Ryff & Keyes, 1995). Considering these specific dimensions of well-being, it is surprising that the literature examining their changes and configurations over the period of adolescence has been so limited. Constructs of Autonomy, Personal Growth, and Environmental Mastery are particularly relevant to youth as they gain independence and begin to think about navigating the real-world of college and/or the work force. Personal Relationships are important across the entire lifespan but might take on a special meaning among adolescents who face peer influences and social pressures in school, extracurricular, and social contexts. Given that one outcome of the developmentally relevant task of adolescent identity development is a sense of purpose or meaning in life (Erikson, 1968), Ryff's concept of Purpose in Life is also important to monitor and track over the teenage years.

Although research has been relatively scarce, Ryff's measure has been successfully used among diverse adolescent and young adult samples, including Asian Americans, with most research framing well-being as dependent variables predicted by constructs such as acculturation, identity, cultural values, and stress (Baker, Soto, Perez, & Lee, 2012; Iwamoto & Liu, 2010). Yet, beyond their roles as outcomes, using these multiple dimensions to create person-centered profiles of psychological well-being is relatively novel, and has many advantages including a more comprehensive understanding of health. For instance, do some youth report consistently high or low levels of well-being across all dimensions? Or, might some report strengths in more external variables (e.g., Positive Relations, Environmental Mastery), but lower satisfaction with internally-driven constructs (e.g., Purpose in Life, Personal Growth)? Another possible pattern might involve high Autonomy to the detriment of Positive Relations with others. These and other possibilities might exist in terms of how well-being dimensions coalesce over time. Whether they form distinct patterns, change over adolescence when well-being might be especially in flux, and whether such patterns of change can be correlated with other key variables in adolescents' lives remain key empirical questions that the present study attempts to address.

Correlates of Well-Being Profiles

Beyond the importance of understanding the basic structure of and normative change in well-being profiles among Asian Americans, it is also critical to determine what might predict stability or specific patterns of change. During adolescence, establishing a sense of identity is a critical developmental task, and identity fluctuates as youth undergo self-exploration (Erikson, 1968; Fuligni et al., 2012; Kiang, Witkow, & Champagne, 2013). Ethnic and American identity specifically have been examined and linked with positive outcomes (Phinney, 2003). As such, changes in cultural identity could be associated with changes in psychological well-being.

A rich literature points to cultural identification as a resource in adolescents' lives. Ethnic identity has been consistently correlated with a wide range of positive indicators of adjustment (e.g., self-esteem, academic motivation, social relationships, purpose, daily well-being) (Fuligni, Witkow, & Garcia, 2005; Kiang & Fuligni, 2010; Kiang, Yip, Gonzales-Backen, Witkow, & Fuligni, 2006; Phinney & Ong, 2007; Umana-Taylor, 2004). Although less commonly studied, American identity is another major form of identity for ethnic minority youth and has been also linked with adjustment (Oetting & Beauvais, 1991; Scheibe, 1983).

However, little work has addressed whether these identities have competing or interactive effects, and the few existing studies have been contradictory. For instance, in a cross-sectional sample of Asian youth, ethnic and American identity each conveyed similar benefits and did not significantly differentiate overall adjustment (Yip & Cross, 2004). Moreover, both ethnic and American identities have been linked to self-esteem, but only among White students; American identity is less consequential for those from ethnic minority backgrounds (Phinney, Cantu, & Kurtz, 1997; Phinney & Devich-Navarro, 1997). Yet, in recent longitudinal work, Kiang et al. (2013) found that both identities were beneficial, and an interactive effect was also found such that Asian American youth with high levels of ethnic and American identity reported the highest levels of academic motivation. The current study contributes to and extends the literature by investigating links between cultural identity and well-being measured via within-person profiles.

The Current Study

Taken together, the present research addresses a critical limitation in the field of positive psychology by examining how psychological well-being takes shape in the lives of Asian American youth. Notably, the well-being model in question (i.e., Ryff's measure of subjective well-being) has been applied across diverse U.S. ethnic minority and international contexts, but mostly at the level of examining mean group differences. Its use and explorations of validity among the Asian American adolescent population are still rather scarce. Hence, we begin by first exploring the factorial structure of the scale to provide insight into its conceptual validity among our unique sample. We next use hidden Markov analysis, sometimes referred to as latent Markov transition analysis, to identify how reports on Ryff's individual dimensions of well-being can determine distinctive patterns or profiles, and whether or how classification among these profiles vary by demographic variables (e.g., age, gender, nativity) and change over the high school years. We then examine whether ethnic identity, American identity, and their interaction are associated with profile membership over time. Based on prior work, we expected that both ethnic and American identity would be consistently related to healthier well-being profiles. Further, drawing on the acculturation literature that has supported wide benefits of biculturalism (e.g., Berry, 2003; Phinney, Honrenczyk, Liebkind, & Vedder, 2001), we expected that having high levels of both ethnic and American identities would be the most adaptive. Determining the applicability of Ryff's well-being model using a novel, profile-based approach, and examining culturally-relevant predictors, will provide key insight into the shape, structure, and promotion of positive development among Asian American youth.

Methods

Participants

A total of 180 participants were 9th (49%) and 10th graders who were identified by schools as Asian on matriculation forms. Data collection began in 2007–2008. The average age of participants at the beginning of the study was approximately 15.00 years (SD = 0.92). The sample was 59% female, and 75% U.S.-born. According to self-reported ethnicity, participants' specific heritages were vastly heterogeneous (28% Hmong, 8% Chinese, 11% South Asian, 22% mixed ethnic heritage, mostly within two different Asian groups, 8% panethnically-identified, and the remaining 23% comprised of smaller South, East, and Southeast Asian ethnic groups).

Procedures

Adolescents were recruited from six public high schools in emerging immigrant communities in the Southeastern U.S. that were selected through a stratified cluster design. Our overall sampling strategy was based on methods used successfully in prior research with adolescents from emerging immigrant communities (e.g., Perreira, Fuligni, & Potochnick, 2010). We began by using state-level, school-system race data to create a sampling frame of all school districts in the area that had any representation of Asian American students in grades 9 and 10. To make data collection feasible and school visits worthwhile, school districts with less than 250 students of Asian descent were not included in the sampling frame, and the remaining districts were then grouped by "medium" (250–1000 Asian students) and "large" (over 1000 Asian students) representation, which was conceptualized based on observations of relative ethnic distributions in other schools among the region. We randomly selected one school district from each of these groups to target for recruitment. Within these districts, high schools were then randomly selected for participation. Ultimately, the schools that agreed to participate in the study varied in overall size, ethnic diversity, and academic achievement. More specifically, two of the schools were predominately African American (60–65%), with Latino and White students each comprising about 10–20%, and Asians comprising about 4–6% of the remaining student body. Two of the schools were mostly White (60%), with Latinos and African Americans each comprising 10–20%, and Asians comprising about 3–4% of the remaining student body. Two of the schools were also predominately White (80%), with Asian American students comprising about 7–10 % of the student body and with smaller distributions (less than 5%) of Latino and African American students.

Recruitment procedures were identical in each school. In small group settings, all students identified by the schools as Asian were invited to participate in a study on the social and cultural issues that affect their daily lives. Upon returning parental consent and adolescent assent forms during a follow-up school visit, participants were administered a packet of questionnaires during school time, which took 30–45 minutes to complete. Approximately 60% of those invited to participate returned consent/assent forms and participated in the first wave of data collection.

Students completed follow-up surveys once a year for three additional years. Surveys were consistent in content and length. For Waves 2 and 3, researchers returned to the schools to distribute questionnaires during class time. Participants were sent questionnaires in the mail if they were no longer in school or if they were absent on the day the surveys were administered. For Wave 4, since the older cohort was presumably one year post-high school, we collected data entirely through postal mail. Adolescents received $25 for participating in Wave 1 of the study (which involved an additional daily diary component not reported on in the current study), $15 for Waves 2 and 3 each, and $20 for Wave 4. The retention rate in Wave 2 was approximately 91%. About 87% of the original sample was retained in Wave 3, and 67% in Wave 4. Notably, we ran preliminary tests to examine possible effects due to attrition. The participants who subsequently dropped out of the study after Wave 1 did not differ from the rest of the sample on any of the key study variables, using a $p < .01$ cutoff given the number of tests run.

The design of our study resulted in four waves of data collected from two cohorts starting in grades 9 and 10. To aid in the interpretation of longitudinal effects, data were collapsed at the grade level such that both cohorts were combined when possible. Hence, approximately half of the sample was included at grade 9 (first wave of data from 9th grade cohort) and one year post high school (last wave of data from 10th grade cohort) and data from the full sample or from both cohorts were aggregated to represent grades 10–12.

Measures

Psychological well-being—Ryff's Six-Factor Model of Well-being (Ryff, 1989) assessed well-being. This measure has been used among both international and ethnically diverse U.S. samples including Asian Americans (Baker et al., 2012: Iwamoto & Liu, 2010). In the current study, the Self-Acceptance factor was not included in initial data collection due to its conceptual overlap with other measures (e.g., self-esteem). Hence, five factors of well-being were assessed: positive relationships with others, purpose in life, personal growth, environmental mastery, and autonomy. Sample items include: "Most people see me as loving and affectionate" (positive relationships), "Some people wander aimlessly through life, but I am not one of them" (purpose in life), "For me, life has been a continuous process of learning, changing, and growth" (personal growth), "My daily activities often seem trivial and unimportant to me" (environmental mastery), and "My decisions are not usually influenced by what everyone else is doing" (autonomy). For all items, participants rate how much they agree with the statements on a six-point scale (1 = *Strongly Disagree* to 6 = *Strongly Agree*). Each subscale contains nine items. Six items from the purpose in life and personal growth subscales, five items from the positive relationships subscale, and four items from the environmental mastery and autonomy subscales were reverse-coded. The mean of each subscale's items was calculated separately, with higher scores indicating greater levels of well-being. The internal consistencies of these originally proposed 9-item subscales ranged from $\alpha = .65$ to .80.

Ethnic and American identity—A shortened Multidimensional Inventory of Black Identity (MIBI) used in prior work (Yip, Seaton, & Sellers, 2006) measured ethnic and American identity. Successfully used with Asian American samples (e.g., Kiang et al.,

2006), items were modified to be relevant to and completed by members of any ethnic group. The 4-item centrality subscale assesses whether individuals feel their ethnicity is central to their self-concept. A sample item reads, “In general, being a member of my ethnic group is an important part of my self-image.” The 4-item private regard subscale measures positive feelings toward one’s ethnic group. A sample item reads, “I feel good about being a member of my ethnic group.” As done in prior work (e.g., Kiang et al., 2013), parallel items were created for American centrality and regard (e.g., In general, being American is an important part of my self-image, I have a strong sense of belonging to America). All items are scored from 1 = *strongly disagree* to 5 = *strongly agree* with higher scores reflecting higher centrality and regard. Internal consistencies ranged from .87 to .91 across subscales and within the multiple study waves.

Statistical Analysis

Our statistical analysis plan involved multiple steps. First, we explored the factor structure of Ryff’s originally proposed subscales through a Confirmatory Factor Analysis (CFA), with the intention of finding valid evidence for the applicability of the model for our sample of Asian American youth. However, if such evidence was not found, our strategy was to then use a combination of post-hoc data-driven and conceptual approaches to explore other models (e.g., through Exploratory Factor Analysis, alternative CFAs) that might provide a better fit.

To the extent that valid subscales could be configured, data would then be analyzed using the Hidden Markov Model (HMM, MacDonald & Zucchini, 1997; Ip et al., 2010; Ip et al., 2013). Like Latent Class Analysis (LCA), the HMM analyzes “hidden” subgroups of individuals based on a set of variables which are used to characterize a specific profile of interest, in this case, structure or “states” based on different dimensions of subjective well-being. The HMM is a longitudinal extension of LCA in which an individual can transition from one profile to another, and it assumes that the current profile at time t is only dependent on the profile at time (t-1) and not on profiles before then. For the current study, the profiles that emerge over time for an individual thus form a trajectory that can be used for subsequent longitudinal analyses in identifying predictors and correlates. Using this analytical approach, we: (1) delineated profiles based on the patterns of well-being that were formed by the five subscales selected from Ryff’s measure of well-being: Autonomy, Personal Growth, Environmental Mastery, Positive Relationships with Others, and Purpose in Life; (2) examined the stability of the profiles and their transition dynamics over time; and (3) examined the association between profile membership and other personal traits (i.e., cultural identity).

The Bayesian Information Criterion (BIC) was used to select the number of profiles from the data. The profiles were inspected and labeled according to the values of the characterizing variables. The prevalence of the profiles over time was visualized using graphical methods and a transitional probability table was used to describe transition dynamics. Possible demographic differences in the profiles that emerged were tested using an ANOVA (for age effects) and Chi-squared tests (for gender and generational status).

To examine associations with cultural identity, we used multi-variable longitudinal analysis in which profiles were treated as dependent variables. Two distinct models were tested using the following sets of explanatory variables: (Model 1) Ethnic Centrality and American Centrality; and (Model 2) Ethnic Regard and American Regard. In both models, the respective interaction term was included in each, and age, gender, and nativity were entered as covariates. Because the dependent variable (i.e., well-being profiles) might not necessarily follow a rank order, we allowed for the possibility of a partially ordered structure among the profiles. If indeed a partially ordered structure existed, we would use a generalized model for partially ordered responses to analyze the data. The idea underlying the partially ordered model is based on the mathematical theory that a partially linear structure can be iteratively decomposed into ordered and unordered substructures (Zhang & Ip, 2012). Appropriate mixed effects linear logistic submodels can then be individually applied to the respective ordered and unordered substructures. The mixed effects were incorporated into logistic regressions to account for the correlation between the repeated observations of the same individual over time. In other words, concurrent predictors were designated as fixed effects and an individual-specific random intercept was included in the model to account for nested observations within the same individual over time. In the HMM analysis, missing values from the Ryff measures were treated as missing at random (MAR; Schafer, 1997). MAR assumptions are generally robust (Schafer & Graham, 2002), particularly in cases such as in the present study whereby rates of missingness are unlikely to depend on the value of the missing data (e.g., high autonomy persons missing data on the autonomy measure). The most probable profile value was imputed to the trajectory using an Expectation-Maximization algorithm. For analyses with cultural identity, students with missing identity measures were not included.

The HMM was implemented through a specialized Matlab program. The partially ordered linear model analysis was conducted in SAS procedures including PROC GLIMMIX and PROC NLMIXED (SAS Inc., Cary, NC). All tests used the significance level of $p < .05$.

Results

Factor Analysis and Measurement of Well-Being among Asian Americans

The fit of Ryff's well-being model consisting of the conventionally proposed five factors, with 9-items in each factor, was examined through a CFA. Goodness-of-fit indexes suggested that the fit was poor (CFI=0.523, TLI=0.495, RMSEA=0.076, SRMR=0.107). For example, both CFI and TLI were well under the commonly acceptable value of .90.

Rather than force the original subscales onto our specific population, we explored alternative factor structures that might provide a better fit through Exploratory Factor Analyses (EFA). Results from a scree plot from these analyses showed seven eigen values larger than 1.0. Upon further inspection of the results of these one-factor to seven-factor EFA solutions, we determined that the 5-factor solution was the most consistent to theory. In our preliminary analyses, an item was included into a specific factor if its loading was greater than .40, and if it did not have any cross-loadings greater than .40. With these criteria in mind, several of the factors that emerged did appear to map on to Ryff's subscales. For example, one factor was neatly comprised of five items from the Purpose in Life scale, and another factor consisted

of six Autonomy items. However, many of the items did not fall squarely into the originally theorized domains. For instance, many items appeared to cluster across subscales to form a positively-worded factor and a negatively-worded factor. An additional factor captured both positively- and negatively-worded items from several scales (e.g., Environmental Mastery, Autonomy, Personal Growth). Nonetheless, we attempted to fit a 5-factor confirmatory model to the data based on results from the EFA and found that the resulting goodness-of-fit indexes still indicated lack of fit (see Table 1).

Due to the results of the above analysis and growing evidence that, for individuals from ethnic minority backgrounds, there are substantial methodological concerns associated with negatively-worded items found in commonly-used well-being measures (e.g., Rosenberg's self-esteem scale; Gartner, Kiang, & Supple, 2012; Supple & Plunkett, 2010), we followed recommendations to reduce measurement bias (Marsh, 1997) and used CFA to test the structure of a five-factor model that included only positively-worded items from Ryff's original scale. Also shown in Table 1, the goodness-of-fit indexes all improved. Particularly, the 5-factor model with Post-hoc Model Modification (PMM, Kaplan, 1990) was deemed acceptable for the selected subset of items. The PMM is a procedure that adjusts a small number of between-item residual correlations from zero to non-zero values to improve goodness-of-fit. As a result, through modeling procedures and theoretical judgment, the 5-factor model using only positively-worded items was selected as the final framework for creating summary scores for the subscales and for further modeling and analysis.

Preliminary Analyses and Descriptives

Upon establishing the appropriateness and validity of using a modification of Ryff's subscales to measure well-being among Asian American youth, we proceeded with additional analyses to examine changes in and correlates of well-being constructs over time. In light of preliminary analyses, bivariate correlations and descriptives for key study variables are listed in Table 2. In general, the five subscales of well-being were positively and significantly correlated with each other. Subscales of ethnic and American identity were also positively and significantly associated. Well-being scales were positively and significantly associated with ethnic and American centrality and regard. In terms of means, adolescents generally reported levels of well-being that were in the range of 4.11 to 5.02, values which were slightly above the midpoint of the 6-point scale. Average levels of ethnic and American identity ranged from 3.71 to 4.43, which were also above the midpoint of those 5-point scales.

Notably, in preliminary analyses, we explored whether well-being and ethnic identity varied by socioeconomic status (using parent education as a proxy) or number of years since immigration (for first-generation participants) and no consistent effects were found.

HMM-Based Profiles of Well-Being

Using the BIC and criteria from Koehler & Larntz (1980), the HMM analysis selected a model that consisted of four profiles. BIC values for the 2, 3, 4, and 5 profiles were 8292, 6890, 6401, and 6447, respectively; lower values are preferred. These profiles followed a partially ordered structure, depicted in Figure 1, in which an arrow indicates a dominance

relationship. For instance, in terms of evaluating adolescents' psychological health, the profile that we labeled as *Hindered* can be arguably placed at the bottom of the hierarchy, the *Functioning* profile can be placed towards the middle, and the two other profiles that emerged, which we labeled *Flourishing and Self-Driven Success*, can be seen towards the top.

Specific characteristics of these four profiles are represented by standardized mean scores on well-being dimensions. As shown in Figure 2, the Hindered profile is characterized by those who reported consistently below average levels of well-being. The Functioning profile represents individuals with levels of well-being that are moderate, or around the mean of the sample. The Flourishing profile reflects individuals who reported above average levels on all well-being dimensions. Individuals in the Self-Driven Success profile also reported above average levels on all well-being dimensions, but their average report of Positive Relationships was slightly lower than those in the Flourishing group. Hence, although both the Flourishing and Self-Driven groups can be seen as being healthier than the Functioning and Hindered groups, further tests (e.g., unordered comparisons) could be conducted to disentangle possible differences between these two higher groups.

Prevalence and Transitions Over Time

The prevalence of the four profiles over time is shown in Figure 3. The Functioning profile was the most prevalent profile across all time points. The Self-Driven Success profile was the least prevalent at first, but its prevalence appeared to increase with time. In contrast, representation in both the Hindered and Flourishing profiles seemed to decrease over time.

In terms of demographic associations with profiles, age was significantly associated with profile membership at baseline (9^{th} grade) such that individuals who were in the Self-Driven Success (M=14.2, SD=0.6) and Flourishing groups (M=14.8, SD=0.7), had lower average ages than the average of the Functioning (M=15.2, 0.9) and Hindered groups (M=15.4, 1.1). Nativity was not significantly associated with profile membership ($p > .05$).

The dynamic of year-to-year changes in profiles was captured by a transition probability table (see Table 3). The diagonal of the table represents the likelihood of an individual staying in the same profile over time, whereas an off-diagonal entry represents the likelihood of an individual transitioning from the profile indicated by row to the profile indicated by column. As shown, the Flourishing and Self-Driven Success profiles were the least stable—an individual had only a 41% and 43% probability, respectively, of staying within those same profiles at any time point. The Functioning and Hindered profiles were more stable with a 67% and 66% probability of staying within the same profile, respectively. The Self-Driven Success profile did not tend to transition into the Hindered profile, and the Hindered profile did not tend to transition into either the Flourishing or Self-Driven Success profiles. In general, most of the movement among profiles seemed to be between Flourishing to Self-Driven Success (26–29% probability of change) and from all other profiles into the Functioning profile (27–29% probability). There was also equal movement from Functioning to either Flourishing (13%) or Hindered (13%).

Associations Between Cultural Identity and Well-Being Profiles

As shown in Figure 1, the profiles derived from HMM formed a roughly conceptually ordered or linear set. Again, the Flourishing and Self-Driven Success profiles can be perceived as the most advantageous, the Functioning profile as moderately adjusted, and the Hindered group can be reasonably presumed to be most detrimental. Although both the Flourishing and Self-Driven profiles reported high scores across all well-being scales, there were still some differences between them. Specifically, the Self-Driven group reported highest levels of well-being on four of the five well-being subscales, but lower Positive Relationships compared to the Flourishing group. Given the cultural relevance and developmental importance of social support and relationships, we did not feel comfortable assigning the Self-Driven group (or the Flourishing group, for that matter) a higher status without further tests. Hence, we conducted additional analyses to determine whether these two healthiest profiles could be differentiated.

Following the general principles established by Zhang and Ip (2012), we therefore used a partially ordered response model to analyze the profile-based trajectories. First, ordered sets were partitioned for analysis using mixed effects ordinal logistic regression. In these analyses, three groups were compared— Hindered, Functioning, and a combined Flourishing and Self-Driven Success group. Then, within the two unordered Flourishing and Self-Driven Success profiles, logistic mixed effects regression was applied to examine differences between them, with the Self-Driven profile positioned as the reference group.

Tables 4 and 5, respectively, show results for models in which ethnic and American centrality, as well as their interaction, and ethnic and American regard, as well as their interaction, were entered as predictors. The cultural identity variables were centered to avoid multicollinearity in the interaction term. Age, gender (0 = female; 1 = male), and nativity (0 = foreign-born; 1 = U.S.-born) were entered as covariates. For the ordered model, data from 177 participants were included, and 39.2% of all observed data were used in the unordered analysis conditional on the two unordered profiles (i.e., Flourishing and Self-Driven).

Ethnic and American centrality—As shown in Table 4, within the ordered submodel, ethnic and American centrality were both significant at the .05 level. A one unit increase in ethnic centrality increased the odds of being in a higher profile by 1.24 times. A one unit increase in American centrality increased the odds of being in a higher profile by 1.54 times. The interaction term, which indicates how much the two identity predictors synergize with each other above and beyond their individual effects, was also significant in the ordered submodel. The values suggest a compounded effect whereby the likelihood of membership in a higher profile (i.e., higher scores on well-being scales) was higher when people were high on *both* ethnic and American centrality. Age was significantly associated with the three ordered profiles and suggested a negative trend over time as adolescents aged. Being female compared to male also significantly lowered the odds of exhibiting a higher profile.

In the unordered submodel comparing the Flourishing and Self-Driven profiles, main effects for centrality were again found with higher reports of ethnic and American centrality significantly decreasing the odds of placement in the Self-Driven versus Flourishing profile. Being female decreased these odds as well and, with age, the odds increased. The interaction

term between ethnic and American centrality was not statistically significant. Given that the patterns of results from the ordered analyses suggest that greater age and being female can generally serve as liabilities, but ethnic and American centrality can boost well-being, we can thus glean from the unordered analyses that the Flourishing profile might reflect a higher state of well-being compared to the Self-Driven group (i.e., given that the beneficial markers of younger age, being male, and greater ethnic and American centrality were positively associated with the odds of being in the Flourishing group).

Ethnic and American regard—Similar to the model with centrality, ethnic regard, American regard, and their interaction were all significant predictors in the ordered submodel (see Table 5). Specifically, a one unit increase in ethnic regard increased the odds of being in a higher profile by 1.41 times. A one unit increase in American regard increased the odds of being in a higher profile by 43%. Again, the interaction suggested a combined effect of both domains of identity predicting higher ordered profiles. Age and gender were again significant and suggested similar negative trends by age and female status.

Main effects for ethnic and American regard were also found in the unordered submodel, with higher reports of regard significantly decreasing the odds of placement in the Self-Driven versus Flourishing profile. Age and gender main effects were also consistently found, as in the model with centrality, which again suggest that the Flourishing profile can be arguably seen as the highest level of functioning.

Discussion

Theoretical perspectives and empirical models emphasizing positive youth development have proliferated in recent years (Ryan & Deci, 2001; Ryff, 2014), but a focused study of positive psychology constructs among adolescents from Asian American backgrounds is still rare. The goal of the current study was to target this under-researched area and examine a well-known model of psychological health among a sample of Asian American youth. More specifically, we began by exploring the factorial structure of Ryff's (1989) eudaimonic well-being scales. We then used a within-person approach to create well-being profiles and to examine their prevalence and stability over time. By investigating Ryff's model of psychological health within the context of a Asian American sample, we hoped to shed light on what the structure of well-being looks like among Asian Americans, and how adolescents' well-being profiles are linked to culturally-salient aspects of ethnic and American identity.

Although Ryff's well-being scales have been widely used among both U.S. and cross-national samples (see Ryff, 2014, for a review), there are underexplored cultural and developmental questions related to its applicability. Although some work has found evidence for factorial validity using Asian international samples (e.g., Kitamura et al., 2004), no psychometric study of which we are aware has tested the measure's cultural invariance among Asian American adolescents specifically. Yoshikawa et al. (2016) discuss the methodological challenges that need to be considered when conducting research with Asian Americans, with one major concern relating to the presumed cultural applicability of measures that were developed using non-Asian norms. The results of our preliminary CFA

testing the original items of Ryff's measure confirm the importance of acknowledging these methodological concerns given that the theoretical subscales were not empirically supported by our data. Upon further exploratory post-hoc analyses of the factor loadings of specific items, we determined that there are likely flaws in universally applying the full nine-item version of Ryff's well-being measure to our particular sample. For example, results from our EFA suggest that Asian Americans might not differentiate across the separate subscales as expected, and that there could be conceptual overlap in the valence of items or in the meaning of some of the dimensional constructs.

However, guided by some prior work suggesting that negatively-worded items in Likert-type scales can contribute to measurement problems among immigrant youth (Marsh, 1997; Supple & Plunkett, 2010), we tested the factorial validity of the measure after including only the positively-worded items. Results from this CFA found that the items did fit neatly into five conceptually-consistent subscales. While these findings enabled us to feel confident in examining profiles of well-being based on modified subscales created from positively-worded items only, they also confirm the importance of systematically examining measurement issues, particularly of well-known scales, among diverse samples. Future work that includes participants from multiple ethnic groups, both Asian and non-Asian, should conduct a more formal and rigorous factor analysis and test of measurement invariance using Ryff's full scale. Indeed, although the measure itself has been translated and used extensively across diverse samples (Ryff, 2013), such wide use does not guarantee its cultural validity or appropriateness.

The Hidden Markov Modeling procedure that we used to form profiles of well-being, based on the adapted, positively-worded subscales, found that dimensions of well-being tend to package together with most adolescents reporting consistently high, low, or average levels of psychological functioning. Four specific profiles seemed to fit the data best—*Flourishing*, which was characterized by relatively high levels of well-being reported on all subscales; *Hindered*, defined by relatively low levels on all subscales; *Functioning*, the most prevalent profile at each time point, which reflected consistently moderate levels; and *Self-Driven Success*, which was comprised of adolescents who reported highest levels of well-being in four of the five subscales, but more moderate levels of Personal Relationships.

Placement in these profiles did not vary by nativity, but age did have a significant, inverse effect which suggested that adolescents tended to drop from healthier well-being profiles over time. Existing longitudinal research examining individual dimensions of Ryff's well-being measure is limited and offers mixed evidence concerning age-related changes over time, depending on the specific subscale (Ryff & Keyes, 1995). However, our results are consistent with other areas of research on adjustment that supports the idea that general levels of functioning (e.g., self-esteem, positive affect) might decrease with age (Charles, Reynolds, & Gatz, 2001; Harter, 1999). Clearly, more longitudinal research could help replicate and shed further light on these developmental patterns.

Indeed, patterns of well-being were found to change from year to year, with adolescents shifting profiles over time. For example, Flourishing, the profile that is perhaps the most well-off, was also the least stable (41% stability from year to year). These youth had a 29%

probability of either moving into the Self-Driven group or a 27% probability of dropping to the Functioning group in any given year. The substantial shifts found across all profiles suggest that the constitution of adolescents' well-being is quite malleable and perhaps dependent on certain factors in their lives that either push their well-being to flourish or fail. As described in more detail below, our results also suggest that one such factor that could promote adolescents' well-being is their ethnic and American identification. More work that examines and specifically pinpoints push and pull factors could be beneficial in identifying ways to tip these youth to the healthier side of well-being.

Overall, the patterns of prevalence and transition in profiles over time suggest that Asian American youth do face substantial threats to their well-being, which is at odds with the model minority image which dangerously and erroneously assumes that they are generally well-adjusted and problem-free (Qin, 2008). Indeed, one of the reasons why Asian Americans have been neglected in the well-being literature could stem from the idea that Asian Americans' psychological well-being might be taken for granted. Recent work has delineated the many ways in which historical contexts, including the influence of such social stereotypes, can undermine Asian American child development (Kiang, Tseng, & Yip, 2016), and our results support the notion that the model minority myth might be problematic for the many youth who do not live up to the image of positive adjustment. In fact, over 15% of the sample at any given year fell into the Hindered state, and the probability of adolescents slipping from the Functioning to Hindered profile was also notable at 13%. One way to gain additional insight into the characteristics of the members of these potentially struggling groups and develop strategies to promote well-being is to examine possible predictors of such profile change.

As expected, our results suggest that ethnic and American identity, as defined by dimensions of centrality and regard (Sellers et al., 1998), could be important contributors to adolescents' well-being profiles with each domain of identity independently associated with healthier well-being. That is, higher levels of both ethnic and American centrality and regard increased the likelihood of adolescents being in a higher or healthier well-being state. Interactive effects were also notable whereby the odds of being in healthier profiles increased even more when both ethnic and American identity were strong, which provides some support for models of biculturalism (Berry, 2003; Kiang et al., 2013; Phinney et al., 2001). These results are consistent with prior work documenting positive developmental consequences of having a strong sense of belonging and meaning tied to one's cultural group or groups (Kiang & Fuligni, 2010; Oetting & Beauvais, 1991; Phinney & Ong, 2007; Umana-Taylor, 2004).

In the unordered submodels, it is notable that ethnic and American identity increased the odds of placement in the Flourishing profile compared to the Self-Driven profile. Given the benefits of cultural identity, and the patterns found with both identity, age, and gender in the ordered submodels, these results suggest that individuals in the Flourishing profile might be considered more well-adjusted than those who are Self-Driven. Although the Self-Driven profile reported several high levels of well-being that are likely beneficial, their reported lower levels of positive relationships with others are notable, which might not be as adaptive. More research is certainly needed to better understand the distinguishing characteristics of

this particular group of youth. Nevertheless, our results suggest that the developmental task of identity construction during adolescence could have many implications for youth outcomes, with our results extending prior work by mapping out well-being profiles that provide a more holistic and complete picture of psychological health.

In light of the novel findings of our work, several limitations should be noted. With any longitudinal study, subject attrition is a potential concern. Although the recruitment of youth from understudied emerging immigrant communities in the U.S. addresses an important gap in the literature, our results might not be generalizable to Asian Americans in other geographic areas. Further work is needed to replicate, validate, and extend our findings. We were also limited by a broadly defined panethnic sample. Asian Americans are heterogeneous, and recent reports caution against aggregating across multiple ethnicities (Asian American Federation, 2014; Kiang et al., 2016). Regrettably, in the current study, adolescents comprised subethnic groups that were too small for conducting meaningful comparisons. More work that examines subgroup and other possible differences (e.g., by family immigration history or factors such as socioeconomic status) within a heterogeneous Asian American sample would be valuable.

In terms of measurement, our original study did not assess Ryff's dimension of Self-Acceptance due to its conceptual overlap with other assessments in the larger study (e.g., self-esteem) and, hence, our decision to streamline the overall survey. Our within-person approach therefore did not include Ryff's (1989) full six-factor model. It is possible that our CFAs and EFAs might have been different had this original subscale been included. It would be important for future work to conduct a thorough analysis of measurement validity, as well as a profile analysis of well-being, using the full measure. We also note that our models were not comprehensive; additional variables (e.g., acculturation conflict, foreigner objectification) could be relevant to the patterns found, but were not measured in the current study.

Despite these limitations, our longitudinal results support the importance of cultural considerations in studying the construct and meaning of well-being, as well as the utility of using a profile approach to continue examining qualities of well-being among Asian American youth. One way that future work would extend our findings is by conducting a deeper analyses of how well-being might be conceptualized in the first place among Asian Americans. For example, the use of focus groups to explore what well-being means and to more systematically investigate possible cultural variation in the definition, diverse dimensions, and implications of well-being would be valuable. Indeed, although many positive psychological constructs have origins in Eastern traditions (Bodhi, 2013), they are rarely discussed with a central focus on Asian Americans. This is a striking oversight for many reasons, but especially due to the fact that ethnic minority youth have been often subjected to a deficit model of development which presumes them to be less healthy than the mainstream majority (Wong & Rowley, 2001). Yet, in contrast to this view, Asian Americans are frequently deemed the model minority and as relatively immune to the effects of social stratification and other race-related problems (Qin, 2008). This apparent "lose-lose" predicament can be addressed by more research that is devoted to understanding resiliency factors (e.g., cultural identity) and specific features of positive development (e.g.,

eudaimonic well-being) among Asian American adolescents. The implications of this challenging situation is wide-reaching in terms of both scholarship as well as the educators and clinicians who work directly with Asian Americans. The current study provides initial insight into this much-needed area of work by investigating a well-known model of positive psychology among Asian American youth and pointing to the need to further explore the complexity of how dimensions of well-being might be differentiated and predicted by, and predictors of, other developmentally and culturally-relevant aspects of adolescents' lives.

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Illustration of Four-Profile Model of Psychological Well-Being

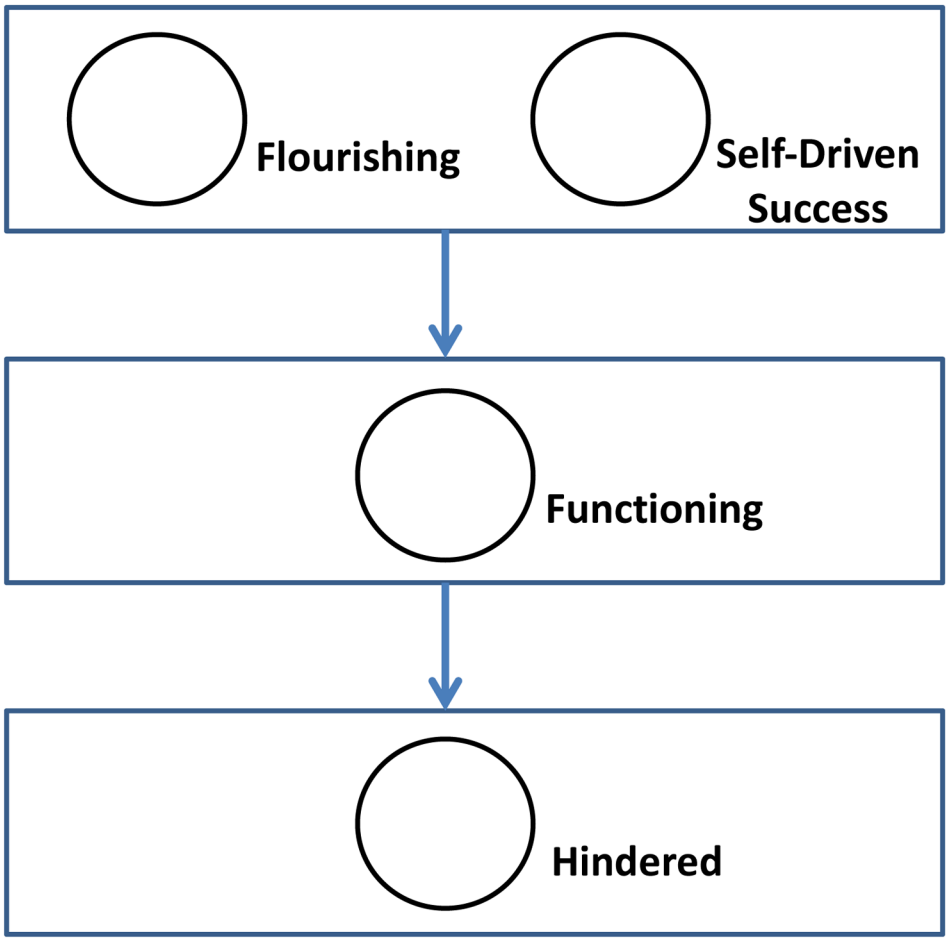

Figure 1.
Illustration of Four-Profile Model of Psychological Well-Being

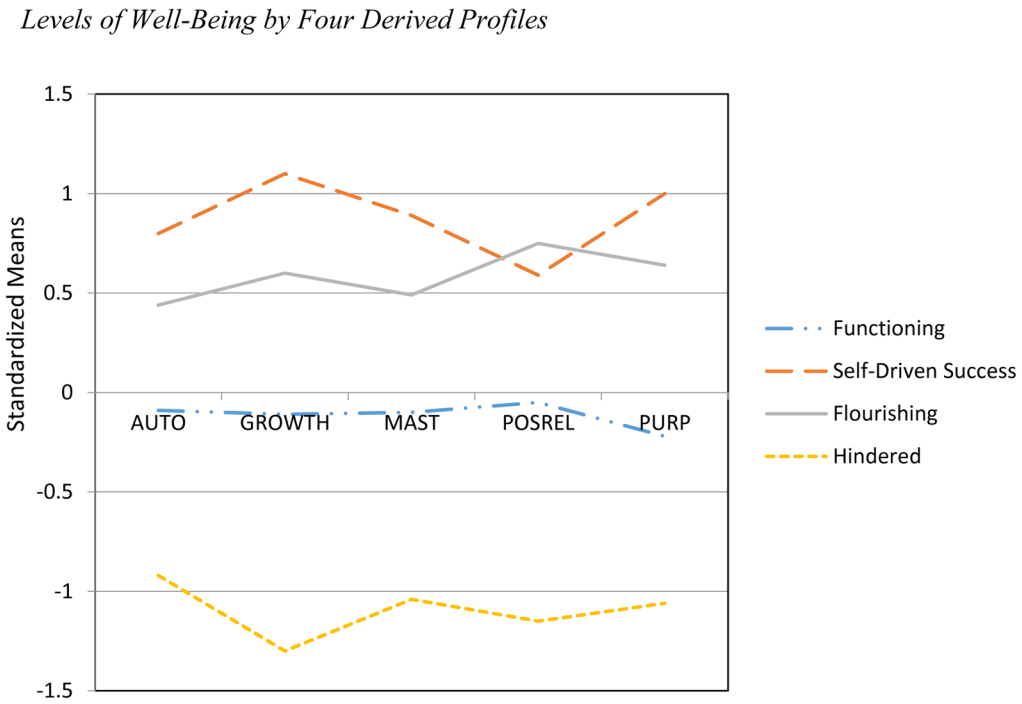

Figure 2.

Levels of Well-Being by Four Derived Profiles

Note: All variables were standardized.

AUTO=Autonomy; GROWTH=Personal Growth; MAST=Environmental master; POSREL= Positive relationships with others; PURP=Purpose in Life

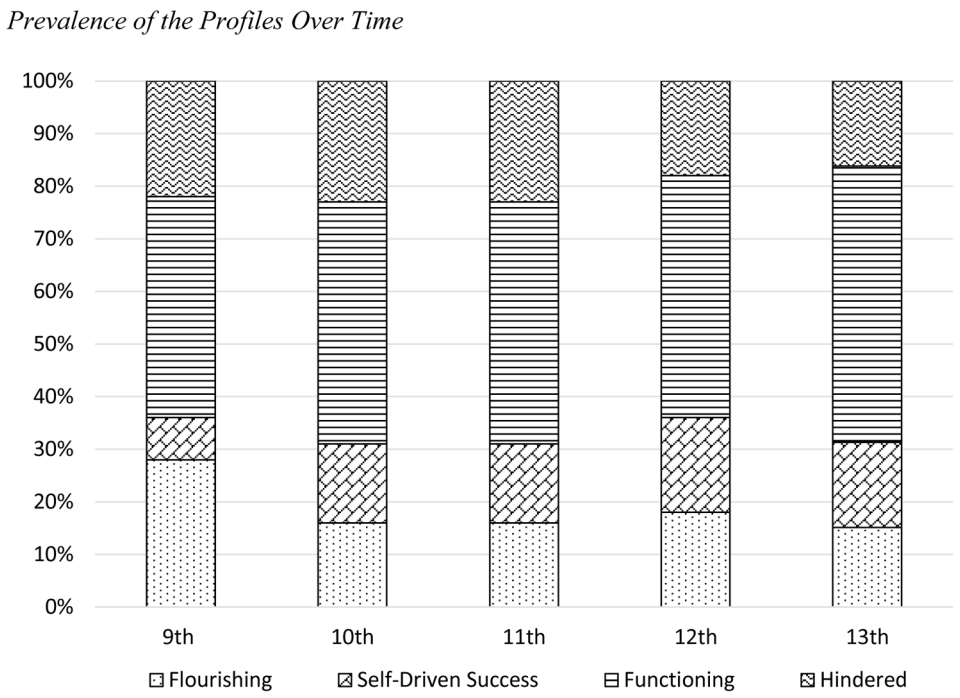

Figure 3.

Prevalence of the Profiles Over Time

Note: Grade 13 refers to data collected one year post high school. Functioning (Percent frequencies in 9th through 13th grade = 42, 46, 46, 46, 52), Self-Driven Success (Percent frequencies in 9th through 13th grade = 8, 15, 15, 18, 16), Flourishing (Percent frequencies in 9th through 13th grade = 28, 16, 16, 18, 15), Hindered (Percent frequencies in 9th through 13th grade = 22, 23, 23, 18, 16).

Table 1

Fit Statistics for CFAs of Alternative Models of Well-Being

	5-factor Model (all items*)	5-factor Model (positively-worded items)	5-factor Model with PMM** (positively-worded items)	Cutoff for acceptable fit
Standardized Root Mean Square Residual (SRMR)	0.091	0.075	0.065	<.08
Root Mean Square Error of Approximation (RMSEA)	0.076	0.077	0.048	<.08
Comparative Fit Index (CFI)	0.699	0.815	0.908	>.90
Tucker Lewis Index (TLI)	0.670	0.776	0.886	>.90

* All items that have factor loadings >.40 on the primary factor.

** PMM=Post-hoc Model Modification. PMM is a procedure that adjusts residual correlation values to non-zero values to improve goodness-of-fit.

Table 2

Bivariate Correlations and Means (SDs) between Study Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Means (SD)
(1) Pos. Rels.	.44.63	.45–.53	.44–.56	.45–.58	.32–.39	.24–.45	.31–.44	.21–.43	.28–.46	4.67–4.76 (.85–.1.00)
(2) Purpose		.38–.63	.49–.63	.42–.64	.39–.53	.20–.47	.27–.48	.12–.30	.18–.30	4.39–4.53 (.95–1.19)
(3) Growth			.30–.73	.43–.58	.42–57	.29–.48	.35–.54	.23–.34	.34–.45	4.87–5.02 (.92–1.09)
(4) Env. Mast.				.39–.58	.28–.49	.21–.42	.21–.46	.14–.37	.20–.27	4.11–4.27 (.79–1.03)
(5) Autonomy					.40–.63	.08–.34	.15–.48	.16–.31	.17–.27	4.27–4.56 (.84–.95)
(6) Eth. Cent						.56–.73	.79–.86	.19–.43	.20–.46	4.02–4.15 (.95–1.02)
(7) Eth. Reg.							.50–.70	.23–.44	.28–.56	4.16–4.43 (.76–.93)
(8) Am. Cent								.53–.61	.78–.89	3.72–4.05 (.90–1.03)
(9) Am Reg.									.53–.62	3.95–4.16 (.82–.99)

Note. Well-being subscales consist of positively-worded items only. Correlations reflect ranges found between multiple study waves.

Table 3

Transition Probability Table of Four Derived Profiles

	New Profile			
	Flourishing	**Self-Driven**	**Functioning**	**Hindered**
Original Profile				
Flourishing	0.41	0.29	0.27	0.03
Self-Driven	0.26	0.43	0.29	0.02
Functioning	0.13	0.04	0.67	0.13
Hindered	0.04	0.04	0.27	0.66

Note: Values **on the diagonal** reflect the probability of **staying in the same profile** at any given time point. Values **off the diagonal** reflect the probability of **transitioning** from the row profile to the column profile.

Table 4

Partially Ordered Mixed Effects Logistic Models with Ethnic and American Centrality Predicting Change in Profiles Over Time

	Ordered submodel		Unordered submodel	
	Odds ratio	**p-value**	**Odds ratio**	**p-value**
Age	0.66	<.05	1.78	<.001
Gender	0.53	<.05	0.60	<.05
Nativity	0.67	0.30	0.90	0.68
Ethnic centrality	1.24	0.11	0.68	<.01
American centrality	1.54	<.01	0.54	<.001
Ethnic*American	1.25	<.05	1.19	0.18

Note: For the ordered model, three groups were compared with a combined Flourishing and Self-Driven Success profile treated as the highest ordered state, the Hindered profile treated as the lowest state, and a moderate state reflected by the Functioning profile. In the unordered model, two states are compared. The Self-Driven profile is treated as the reference state and is compared to the Flourishing profile.

Table 5

Partially Ordered Mixed Effects Logistic Models with Ethnic and American Regard

	Ordered submodel		Unordered submodel	
	Odds ratio	**p-value**	**Odds ratio**	**p-value**
Age	0.68	<.05	1.69	<.001
Gender	0.52	<.05	0.56	<.05
Nativity	0.69	0.33	0.92	0.76
Ethnic regard	1.41	<.05	0.59	<.001
American regard	1.43	<.05	0.56	<.001
Ethnic*American	1.31	<.05	1.10	0.46

Note: For the ordered model, three groups were compared with a combined Flourishing and Self-Driven Success profile treated as the highest ordered state, the Hindered profile treated as the lowest state, and a moderate state reflected by the Functioning profile. In the unordered model, two states are compared. The Self-Driven profile is treated as the reference state and is compared to the Flourishing profile.