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Motivated but Constrained: A Four-Country Latent Profile Analysis of Generation Z Travel Motivation and Constraints with Japan as a Test Case

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Abstract

Variable-centered tests of the constraint negotiation thesis show whether the effect of constraints varies with motivation, but not how many people remain motivated despite strong constraints. This study aimed to identify subgroups of Generation Z defined jointly by travel motivation and travel constraints and to compare them across countries. Latent profile analysis was applied to cross-sectional online survey data from Generation Z respondents in Australia, Japan, the Philippines, and Singapore ($n = 300$ each). Because the motivation and constraint scales lacked scalar invariance, indicators were standardized within country and profiles compared in shape and composition; intention (partially scalar invariant) was compared in level. Aspiring-but-constrained profiles (above-average motivation and highest constraints within country) comprised 12% to 24% of each sample and ranked first or second on intention. In every country, a low-motivation profile had the lowest intention. Japanese respondents reported the lowest intention; the association between profiles and intention was not weaker in Japan, but the sample had fewer high-motivation, low-constraint respondents and a large flat majority with lower intention than comparable profiles elsewhere. The findings are consistent with a precondition of the negotiation thesis and distinguish targets for constraint reduction and demand creation.

Keywords: Generation Z; travel motivation; travel constraints; constraint negotiation; latent profile analysis; measurement invariance; cross-national comparison; Japan

1. Introduction

Generation Z is entering adulthood and emerging as an independent travel market. The cohort accounts for about one third of the world's population (Nilsson Vestola & Ek Styvén, 2025) and is expected to become a core consumer group for tourism (Marques et al., 2025). Two features of the growing literature on Generation Z travel behavior limit the conclusions it can support. First, most studies rely on a single country (e.g., Konieczna & Trybuś-Borowiecka, 2025; Marlina et al., 2026; Marques et al., 2025; Nguyen et al., 2026), and a recent review called for comparative designs (Seyfi et al., 2025). Second, most quantitative studies are variable-centered: they estimate average relationships or compare mean levels and therefore describe the cohort as a whole rather than subgroups defined by combinations of motivation and constraint. Together, these features leave a gap: it is not known whether subgroups that combine high motivation with high constraints exist within Generation Z, how large they are, how strongly their members intend to travel, or whether their shares differ across countries.

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Identifying such subgroups matters for two reasons. First, leisure constraints research has long held that constraints influence rather than determine participation (Crawford & Godbey, 1987) and that participation depends on negotiation through constraints rather than on their absence (Jackson et al., 1993). Tests of this negotiation thesis have relied on structural equation models, interaction terms, and multigroup comparisons (Hubbard & Mannell, 2001; Hung & Petrick, 2012; Khan et al., 2019; Son et al., 2008). These tests show whether the effect of constraints varies with motivation. They do not show how many people are both highly motivated and highly constrained, how strongly such people intend to travel, or whether the people least likely to travel face the strongest constraints or simply lack interest (Jackson & Searle, 1985). This limitation is conceptual as well as methodological. The negotiation thesis (Jackson et al., 1993) presupposes that some people remain motivated despite strong constraints, and variable-centered tests do not examine this person-level premise directly. Second, the combination of high motivation and high constraints may be common among Generation Z, whose members are described as economically cautious and price sensitive (Konieczna & Trybuś-Borowiecka, 2025; Nilsson Vestola & Ek Styvén, 2025), and a person-centered analysis can identify this group directly.

The main objective of this study is to identify subgroups of Generation Z defined jointly by travel motivation and travel constraints, to relate these subgroups to travel intention, and to compare them across countries. To this end, the study applies latent profile analysis (LPA) to four indicators of travel motivation and travel constraints among Generation Z respondents in Australia, Japan, the Philippines, and Singapore ($n = 300$ per country) and relates the profiles to travel intention. The four countries were chosen for three reasons. Japan serves as the test case because outbound travel among young people has been a policy concern there (Japan Tourism Agency, 2018). Australia, the Philippines, and Singapore are Asia-Pacific countries in which English is the main language or an official language, so one English instrument could be administered in three countries, and translation was required only for Japan. The four countries also differ in economic conditions and cultural context: GDP per capita in 2024 ranged from about US $4000 in the Philippines to about US $95,000 in Singapore (World Bank, 2026), and only Australia is a Western, educated, industrialized, rich, and democratic (WEIRD) society (Henrich et al., 2010). The design thus holds the birth cohort, the item content, and the survey platform constant while the national context varies. If the same combinations of motivation and constraints recur under such different conditions, the combinations are unlikely to reflect the circumstances of a single country. To the author's knowledge, no previous study has related profiles defined jointly by motivation and constraints to travel intention or compared such profiles across countries. The study makes three contributions. First, it extends segmentation-based tests of the negotiation thesis (e.g., Vassiliadis et al., 2018) with person-centered profiles defined jointly by motivation and constraints. These profiles also describe the heterogeneity within Generation Z that variable-centered descriptions of the cohort conceal. A precondition of the thesis is that some people face strong constraints yet remain motivated to participate. If a profile with high motivation and high constraints exists, the data are consistent with this precondition, and the rank of this profile on travel intention suggests whether intention in this group follows motivation or constraints more closely. Second, it shows how profiles can be compared across countries when scalar invariance is not achieved. Indicators are standardized within country (Fischer, 2004), and profiles are compared in shape and composition rather than in level, as a descriptive counterpart of the similarity tests proposed for multiple-group latent profile analysis (Morin et al., 2016). Third, it treats Japan as a test case for a question of composition. If Japanese respondents report lower travel intention than respondents elsewhere, the profile analysis can locate the difference in the distribution

of profiles, in the association between profiles and intention, or, where the intention scale permits level comparisons, in the level of intention within comparable profiles.

2. Literature Review

2.1. Generation Z Travel Research

Generation Z is defined by birth year, but no boundary is universally accepted (Konieczna & Trybuś-Borowiecka, 2025). The birth years of the respondents (2000 to 2006) fall within every range used in the studies cited, including 1995 onward (Robinson & Schänzel, 2019) and 1997 to 2012 (Konieczna & Trybuś-Borowiecka, 2025). According to generational cohort theory, the experiences that members of a cohort share while coming of age create a generational mindset that remains with them throughout their lives (Gardiner et al., 2014). Segmenting travelers by generation is therefore argued to yield richer information than segmenting them by chronological age or life stage alone (Gardiner et al., 2014). Comparisons across cohorts continue to report such differences: Slovak Generation Z respondents reported stronger restrictions from study obligations and limited time and a stronger influence of social media than older cohorts, whereas financial costs, the most restrictive factor, did not differ across cohorts (Melnyk & Vašaničová, 2026). No other cohort was sampled, so the present study makes no claim that its findings are distinctive to Generation Z. The study is nonetheless relevant to the cohort, because its respondents had reached adulthood, the stage at which members of Generation Z become independent travel consumers (Gardiner et al., 2014).

Most studies sample a single country, as in China (Tseng et al., 2024), Indonesia (Marlina et al., 2026), Malaysia (Fong et al., 2025), Poland (Konieczna & Trybuś-Borowiecka, 2025), Portugal (Marques et al., 2025), Sweden (Nilsson Vestola & Ek Styvén, 2025), and Vietnam (Nguyen et al., 2026). Findings from single, often WEIRD, populations may not generalize (Henrich et al., 2010). Konieczna and Trybuś-Borowiecka (2025) called for comparisons between Western and Asian countries such as Japan, and Nilsson Vestola and Ek Styvén (2025) called for research across diverse communities and cultures. The single-country studies are also variable-centered. Marques et al. (2025) described the travel motivations of Portuguese Generation Z as diverse, whereas Konieczna and Trybuś-Borowiecka (2025) found that travel activity varied little by place of residence or source of income and suggested that travel behavior within the cohort may be becoming homogeneous. Neither finding can reveal subgroups defined by combinations of motivation and constraint, because both rest on variable-centered designs.

Time and money are prominent constraints in this literature. Lack of free time and insufficient funds were the most common reasons for not traveling among Polish respondents (Konieczna & Trybuś-Borowiecka, 2025). Scarcity research indicates that limited financial resources can motivate as well as constrain (Hosany & Hosany, 2026). In scenario experiments, U.S. adults with low childhood socioeconomic status and low current income were willing to pay more for international flights when pandemic travel restrictions were made salient (Kim et al., 2024). High motivation and high constraints may therefore co-occur in the same individuals.

2.2. Travel Motivation and Travel Constraints

In the travel career pattern framework (Pearce & Lee, 2005), novelty, escape and relaxation, relationship, and self-development form a core set of motives shared by most travelers, whereas recognition motives are less important on average but more important among less experienced, younger travelers. Portuguese Generation Z travelers rated recognition lowest among 14 motive factors (Marques et al., 2025). In leisure involvement research, facet profiles have often been used for market segmentation, and most segments score high

on some facets and low on others (Havitz & Dimanche, 1997). By analogy, this study treats general experiential motivation and recognition motivation as separate indicators.

In leisure constraints research, constraints are factors that inhibit participation in leisure activities or the satisfaction derived from them (Jackson, 1988). Crawford and Godbey (1987) distinguished intrapersonal constraints (psychological states such as stress, anxiety, and perceived lack of skill), interpersonal constraints, and structural constraints (money, time, and opportunity). Crawford et al. (1991) arranged these types in a hierarchical model in which intrapersonal constraints are the most proximal and condition the motivation to participate. The typology has been applied to tourism in Asian samples (Khan et al., 2019; Lai et al., 2013) and in Australia, where financial restrictions were the strongest structural constraint (Karl et al., 2022). These applications compared the levels or effects of constraint types but did not examine whether high constraints coincide with high motivation in the same respondents.

2.3. Constraint Negotiation and the Limits of Variable-Centered Tests

An activity may be undertaken despite barriers when preference is stronger than the perceived constraint (Crawford & Godbey, 1987), and barriers that block participation differ from barriers that merely inhibit it (Jackson & Searle, 1985). Jackson et al. (1993) formalized these ideas in their negotiation proposition, which later work has called the negotiation thesis (e.g., Vassiliadis et al., 2018).

Hubbard and Mannell (2001) compared four competing models and found support only for the constraint-effects-mitigation model. In that model, constraints reduced participation but also triggered negotiation, and motivation affected participation only indirectly, through negotiation. Son et al. (2008) partially replicated this pattern among middle-aged and older adults. In their data, the motivation-by-constraint interaction, which corresponds to the balance proposition of Jackson et al. (1993), was not significant, and the best-fitting dual-channel model treated constraints and negotiation as separate influences. Among young women travelers, motivation moderated only two of eight hypothesized effects of perceived risks and constraints on visit intention, both small (Khan et al., 2019). Variable-centered tests of this kind continue to appear; recent models relate constraints to travel intention through mediators such as learned helplessness (Küçükergin, 2026).

Two limitations of these tests motivate the present study. First, as noted above, an interaction term does not show how many people combine high motivation with high constraints. Second, sample-wide coefficients can conceal subgroups, and people whose behavior appears similar need not face the same obstacle (Jackson, 1988, 1990). Mixture-based segmentation has identified segments that differed in the paths linking constraints to negotiation rather than in combinations of motivation and constraint levels (Karl et al., 2022). Godbey et al. (2010) called for research that maps such heterogeneity across demographic and cultural groups.

2.4. A Person-Centered Approach

Person-centered methods address these limitations. LPA, a finite mixture model, identifies latent profiles from patterns across continuous indicators and, unlike traditional cluster analysis, provides statistical criteria for comparing solutions with different numbers of profiles (Spurk et al., 2020; Vujičić et al., 2025). In tourism, Popp et al. (2024) clustered German non-travelers on travel motivation and constraints and found that about one third of them belonged to motivated types. Segments defined by constraints alone have been compared on visit or travel intention (M. Cho et al., 2017; Yang et al., 2025) and used to examine the negotiation thesis (Vassiliadis et al., 2018). A cluster analysis of Generation Z travel preferences in four European and North American countries found that cluster

membership differed by country (Ivasciuc et al., 2025). As noted above, none of these studies related profiles defined jointly by motivation and constraints to travel intention or compared such profiles across countries. A joint profile operationalizes the balance between preference and constraint that Crawford and Godbey (1987) proposed as the predictor of leisure behavior. Travel intention serves as the external criterion against which the profiles are validated.

2.5. Measurement Issues in Cross-National Comparison

Comparing profiles across countries raises a measurement problem, because constraint and negotiation scales developed in Western settings have not always transferred to Asian samples (D. Cho, 2026; Guo & Schneider, 2015; Hung et al., 2020). Metric invariance (equal factor loadings) allows comparison of relationships among constructs across groups. Scalar invariance (equal item intercepts) is additionally required for comparing means, because intercept noninvariance can produce spurious mean differences even when loadings are invariant (Cheung & Rensvold, 2002; Steenkamp & Baumgartner, 1998). Scalar noninvariance thus restricts comparative analysis rather than precluding it (Cheung & Rensvold, 2002; Putnick & Bornstein, 2016).

2.6. Japan as a Test Case

Japan provides a test case for the composition question. Fewer than one in five Japanese nationals held a valid passport at the end of 2024 (Ministry of Foreign Affairs of Japan, 2025; Statistics Bureau of Japan, 2025). A national committee on youth outbound travel reported that the number of outbound travelers in their twenties fell by 39% between 1996 and 2016, mainly because the age group shrank, whereas the outbound rate within the age group changed little (Japan Tourism Agency, 2018). In a nationwide survey of 6976 Japanese aged 18 to 29, 12.3% had already decided to travel abroad for leisure, 52.2% intended to travel in the near future or would travel if the opportunity arose, and 35.5% did not want to travel (Cross Marketing, 2017). The committee grouped these responses as active travelers, passive travelers who would go if invited, and the uninterested (Japan Tourism Agency, 2018).

These figures describe participation and stated orientation, not why intention is low or high. A low national mean in intention would be consistent with two accounts. In the first account, motives exist throughout the cohort but do not translate fully into intention. This account implies a weaker association between profiles and intention, lower intention within comparable profiles (profiles at the same relative position in their national distribution), or both. Consistent with this account, self-enhancement biases tend to be absent or reversed in East Asian samples, and reported free choice in life is lower in Japan than in Western nations (Henrich et al., 2010). Modest self-ratings and a weaker sense of choice could both lower stated intention at a given relative level of motivation. Bank employees in the Philippines and Singapore, however, also perceived less choice at work than American bank employees (Henrich et al., 2010), so the perceived-choice part of this account cannot by itself explain a difference between Japan and these two countries. In the second account, the association is intact, but the cohort, relative to its national mean, contains a smaller share of people who combine strong motivation with few constraints or a larger share with weak motivation. The three-way classification above is consistent with the second account, but the survey did not measure motivation and constraints separately. A person-centered analysis can separate the two accounts.

2.7. Research Questions

The literature reviewed above thus lacks a person-centered account of how motivation and constraints combine within Generation Z, of how these combinations relate to travel intention, and of whether they differ across countries. Three research questions follow.

RQ1. Which profiles of travel motivation and travel constraints are identified within each country, and how similar are the profile shapes across countries?

RQ2. How do the profiles differ in travel intention? In particular, if a profile with high motivation and high constraints exists, where does its intention stand relative to the other profiles, and is the lowest intention found among the highly constrained or among the weakly motivated?

RQ3. Do Japanese respondents report lower travel intention than respondents in the other three countries? If so, does the difference lie in the composition of profiles, in a weaker association between profiles and intention, or in lower intention within comparable profiles?

Gender is examined as a descriptive correlate. Because the data are cross-sectional, the profiles are treated as descriptive types, and their associations with intention are not interpreted causally.

3. Materials and Methods

3.1. Participants and Procedure

The study protocol was approved by the Research Ethics Committee for the Humanities and Social Sciences of Teikyo University (approval no. 25-041), and the study was conducted in accordance with the Declaration of Helsinki. All participants provided informed consent before responding. Data were collected through Freeasy (iBRIDGE Corporation, Osaka, Japan), an online survey platform with panels in all four countries, which allowed the same recruitment procedure in each country. Panel members residing in each country were surveyed in April 2026 in Australia and Japan and in May 2026 in the Philippines and Singapore. The instrument was administered in English except in Japan, where the author, a native speaker of Japanese, translated the instrument. Back-translation was not used because it tests the literal correspondence of two wordings rather than conceptual equivalence, can pass translations that are unnatural in the target language, and can encourage overly literal translation (Behr, 2017; Douglas & Craig, 2007). The possible influence of translation on measurement was examined instead through the invariance tests reported below, and translation is treated as a possible source of intercept noninvariance in the limitations. Respondents were recruited under country and age quotas until 300 completed cases were obtained in each country ($N = 1200$). Gender was not quota-controlled.

The same number of respondents was recruited in each country although the national populations differ widely (about 6 million in Singapore and 124 million in Japan in 2024; World Bank, 2026). Two considerations guided this decision. First, the samples are quota samples from online panels, and the precision of estimates from such samples depends on the number of respondents rather than on the size of the population; even for a probability sample, the finite population correction would be negligible for 300 respondents drawn from a cohort of hundreds of thousands. Second, the profiles were estimated separately within each country and then compared across countries, so equal allocation gives each national analysis the same precision and, for a fixed total sample, minimizes the sampling variance of between-country comparisons. A sample of 300 per country is smaller than the approximately 500 suggested for identifying the number of profiles (Spurk et al., 2020); the checks on whether the same solution was reached from several starts (Table S4) address this limitation in part, and it is acknowledged again in the limitations.

The target age range was 20 to 24 years in Australia, the Philippines, and Singapore and 20 to 25 years in Japan, so all respondents were born between 2000 and 2006. The

wider range in Japan reflects a difference in the survey settings used for Japan and for the other three countries rather than a substantive design choice. In Australia, the provider supplied age only as a single band, so age was not used as a variable. Mean age was 23.10 years ($SD = 1.63$) in Japan, 22.20 ($SD = 1.39$) in the Philippines, and 22.56 ($SD = 1.37$) in Singapore. Women made up 59.7% of the sample (51.3% to 65.7% by country). All items required a response, so there were no missing values or exclusions. Fifty-four respondents (4.5%) gave the same response to all 50 motivation items (6 in Australia, 29 in Japan, 10 in the Philippines, and 9 in Singapore), and 73 (6.1%) to all 20 constraint items (13, 33, 12, and 15). These respondents were retained because uniform ratings are not necessarily invalid; the uniform motivation responders were excluded only in a robustness check.

The same data are used in a companion manuscript (Kawakubo, 2026), which addresses different research questions. That manuscript tests the measurement equivalence of the scales across the four countries and models travel constraints, travel motivation, and financial well-being as correlates of travel intention in a variable-centered design. The present study examines how motivation and constraints combine within persons, how large the resulting subgroups are, and how strongly their members intend to travel. Financial well-being is not analyzed here, and the profile analyses do not appear in the companion manuscript. Both manuscripts report the factor solutions and the invariance tests, on which each depends.

3.2. Measures

Travel motivation was measured with 50 items: 45 drawn from the 74-item motive list of Pearce and Lee (2005) and five developed for this study to extend the recognition motives to status display (cf. the ego-boosting items of Vujičić et al., 2025) and social media sharing. Respondents rated the importance of each motive for international travel on a fully labeled 9-point scale (1 = not at all important, 9 = very important). Exploratory factor analysis yielded two factors. General experiential motivation (44 items) covered novelty, escape and relaxation, relationship, self-development, and related motives, including four of the five new items. Recognition motivation (6 items) covered recognition, self-presentation, and romance-related motives together with the social media item.

Travel constraints were measured with 20 items rated on a 7-point applicability scale (1 = not at all applicable, 7 = very much applicable). The items were written using the leisure constraints model as a classification framework (Crawford et al., 1991; Nyaupane & Andereck, 2008). The items covered everyday and resource-related barriers (Konieczna & Trybuś-Borowiecka, 2025) and destination-related and documentary barriers, including personal safety (Reisinger & Mavondo, 2005; Sönmez & Graefe, 1998), natural hazards (Rittichainuwat et al., 2018), language and cultural differences (Lai et al., 2013; Reisinger & Mavondo, 2005), visa and entry requirements (Lai et al., 2013), and possession of a valid passport (Cross Marketing, 2017). The exploratory analyses again yielded two factors. Structural constraints (6 items) comprised time, funds, travel costs, competing responsibilities, and priorities given to other leisure activities or spending. Intrinsic constraints (14 items) comprised health, motivational, interpersonal, environmental, destination-related, and documentary barriers. The two factors thus do not reproduce the three categories of the hierarchical model, and the label intrinsic constraints denotes the empirical grouping of these 14 items rather than the intrapersonal category. Although this factor combines heterogeneous barriers, it was used as a single profile indicator. Using its seven pairs of items with related content (Table S1) as separate indicators would have raised the number of parameters of a four-profile model with profile-specific variances from 35 to 83, which is large relative to samples of 300 per country.

Travel intention was measured with three items developed for this study (e.g., "I intend to travel abroad for leisure at least once in the next 12 months") on a 7-point agreement

scale (1 = strongly disagree, 7 = strongly agree). Their mean, denoted TI3, served as the primary external criterion. A seven-item composite (TI7) that added four items on interest in traveling abroad was used only in sensitivity analyses, because interest reflects a general attraction to travel rather than a time-specific plan (cf. Perugini & Bagozzi, 2004). Gender was recorded as a binary variable. All item wordings are given in Table S1.

Response formats. The motivation items retained the 9-point importance scale of Pearce and Lee (2005) so that the factor structure could be compared with that study. The constraint and intention items, which were developed for this study, used 7-point scales with verbal labels at every point to provide a neutral midpoint and symmetric response options. Multi-category formats of this kind should not be a default: Dolnicar (2021) argued that they show lower test–retest reliability than binary formats, capture response styles, take longer to complete, and yield ordinal data that strictly permit fewer statistical procedures. Three features of the design bear on these concerns. First, the profile indicators and the observed intention scores are unit-weighted composites of 2 to 44 items rather than single items, which reduces the influence of item-level unreliability ($\alpha = 0.79$ to 0.98). Second, culture-specific response styles can make differences in group means uninterpretable (Dolnicar, 2021). For this reason, among others, motivation and constraint levels are not compared across countries: the indicators were standardized within each country, and the ipsatized and uniform-response robustness checks examine response styles within countries. The same standardization places the four profile indicators on a common metric, so the difference in response range between the 9-point motivation items and the 7-point constraint items does not affect the profile estimation. Third, the item-level models used a robust maximum likelihood estimator, and the profile indicators are the composites rather than the single items. Completion time was not recorded, so respondent burden cannot be assessed beyond the uniform-response rates reported above.

3.3. Measurement Evaluation

The pooled sample was randomly split, stratified by country, into exploratory and holdout subsamples ($n = 600$ each, 150 per country). Exploratory factor analysis used principal axis extraction with promax rotation, and the number of factors was examined by parallel analysis (Horn, 1965) and the Kaiser criterion. Competing solutions were compared by confirmatory factor analysis in the holdout subsample. Exploratory factor analysis was then repeated within each country and compared with the pooled solution using Tucker's congruence coefficient after Procrustes rotation. Internal consistency was assessed with Cronbach's alpha in each country. Discriminant validity was examined in a pooled confirmatory model of the four indicator constructs and the intention factor, using the Fornell–Larcker criterion (Fornell & Larcker, 1981) and heterotrait–monotrait (HTMT) ratios, with 0.85 as the threshold (Henseler et al., 2015).

Measurement invariance of the motivation, constraint, and intention scales across the four countries was tested with multigroup confirmatory factor analysis (Table S2). Because some item distributions were skewed (Table S1), a robust maximum likelihood estimator (MLR) with scaled fit statistics was used. A more constrained model was retained when the comparative fit index (CFI) decreased by no more than 0.010 ($\Delta CFI \geq -0.010$; Cheung & Rensvold, 2002) and the root mean square error of approximation (RMSEA) increased by no more than 0.015 ($\Delta RMSEA \leq 0.015$; Chen, 2007). For the three-item intention scale, whose configural model is saturated, the metric model was judged on its absolute fit. When full scalar invariance failed, up to five intercepts per two-factor scale were freed in order of their modification indices, leaving at least two invariant intercepts per factor (Steenkamp & Baumgartner, 1998). For RQ3, latent means of the three-item intention factor were compared across countries under the partial scalar model, with Japan as the reference group. Analyses

were conducted in R 4.6.0 (R Foundation for Statistical Computing, Vienna, Austria) with lavaan 0.6-21 (Rosseel, 2012) and semTools 0.5-8 (Jorgensen et al., 2026), and in Python 3.14 (Python Software Foundation, Beaverton, OR, USA) with factor_analyzer 0.5.1.

3.4. Latent Profile Analysis

Profiles were estimated on four composite scores: general experiential motivation, recognition motivation, structural constraints, and intrinsic constraints, each computed as the unit-weighted mean of its items. The composites were standardized within each country before profiling, because the invariance results reported below do not justify level comparisons across countries.

Latent profile analysis was conducted separately in each country as a Gaussian finite mixture model in mclust 6.1.3 (Scrucca et al., 2016, 2023). Solutions with one to six profiles were estimated for two families with conditionally independent indicators: EEI, with equal indicator variances across profiles, and VVI, with varying variances. Because the default initialization of mclust does not guarantee the global maximum (Scrucca et al., 2016), each model was estimated from four deterministic and 500 random starts, and replication was checked in a larger run (Table S4). Solutions in which any profile had a variance below 0.05 on a standardized indicator or comprised less than 2% of the sample were discarded as spurious, and the remaining solution with the highest log-likelihood was retained. Solutions were compared by the Bayesian information criterion (BIC) and two criteria set in advance: every profile had to comprise at least 5% of the sample on modal assignment, and entropy had to reach 0.80. A common number of profiles and a common family were used to facilitate cross-national comparison, so that differences in profile shapes do not reflect different assumptions about within-profile variances. The primary solution was the one with the largest number of profiles at which, in every country, the same family had the lower BIC of the two families and met both criteria. In every country, the partition of the primary solution was reached from at least two starts (Table S4; Spurk et al., 2020).

Posterior-probability-weighted profile means of travel intention are reported as the primary estimates, with Welch's analyses of variance and pairwise Welch *t*-tests with Holm correction (Holm, 1979) on modal assignments as inferential checks. Because neither approach corrects for classification error, profile means were also estimated with the Bolck–Croon–Hagenaars (BCH) method (Bakk & Vermunt, 2016; Bolck et al., 2004). Gender composition was tested with chi-square tests within each country. Intention was also compared between Japanese profiles and comparable profiles in the other three countries (13 comparisons; Table S10) on modal assignment, using the mean of the two intention items with invariant intercepts and Welch *t*-tests with Holm correction.

A profile's shape is defined here as its vector of standardized means, which reflects the profile's elevation relative to the national mean as well as its relative pattern across the indicators. Shapes were compared across countries by the cosine similarity of these vectors. Within each pair of countries, profiles were matched one to one by maximizing the total similarity (Hungarian algorithm). Profiles with vectors shorter than 0.5 were not matched, because the direction of such a vector depends on small differences. As a check on composition, a pooled four-profile VVI model was estimated on the within-country standardized indicators ($N = 1200$), and each country's distribution across the pooled profiles was tabulated. A formal multiple-group model was not used because several profiles had no close counterpart in other countries and tests of partial similarity would have required many model comparisons with 300 respondents per country (Morin et al., 2016).

3.5. Robustness Checks and Method Variance

Six robustness checks were conducted. The profile-intention results were re-estimated with TI7 within each country, and classification certainty was inspected for each profile. The profiles were compared with the five-profile solutions and re-estimated separately on ipsatized indicators, without the two intrinsic constraint items that express low desire to travel, and without the 54 respondents who gave the same response to all motivation items.

Because all items were positively keyed, a profile that is high on all indicators could partly reflect an acquiescent response style. Ipsatized indicators (each respondent's four within-country z scores centered on that respondent's mean, so that the four scores sum to zero) retain the relative pattern of a profile but not its elevation and cannot, by construction, retain a profile that is elevated on all four indicators. Each original profile was compared with the most similar ipsatized profile, and the share of the original profile's members assigned to that ipsatized profile was recorded (Table S8).

4. Results

4.1. Measurement Properties and Descriptive Statistics

Sampling adequacy was high for the motivation items (Kaiser–Meyer–Olkin measure = 0.95 to 0.97 across countries) and the constraint items (0.92 to 0.95). For the motivation items, parallel analysis retained two factors in the exploratory subsample, whereas the Kaiser criterion suggested four. The two-factor solution was replicated in every country (congruence 0.93 to 0.99). A four-factor model fit slightly better in the holdout subsample but was not retained because only two items loaded primarily on the third factor (Table S3). For the constraint items, parallel analysis retained two factors in every country, and congruence was 0.92 to 0.99, except for structural constraints in Japan (0.84).

In the holdout subsample, the two-factor constraint model fit acceptably (CFI = 0.915, RMSEA = 0.070, standardized root mean square residual [SRMR] = 0.055), whereas the two-factor motivation model fell below the conventional CFI threshold of 0.90 (CFI = 0.850, RMSEA = 0.071, SRMR = 0.061). CFI tends to decline as the number of indicators increases (Kenny & McCoach, 2003), and conventional cutoffs are rarely met in item-level models with 50 or more items (Marsh et al., 2004). Internal consistency was adequate in every country (α = 0.79 to 0.98; Table S3). The high alpha of general experiential motivation (0.96 to 0.98) partly reflects the length of the scale: within countries, the mean inter-item correlation ranged from 0.39 to 0.54, and the highest correlation between two items was 0.74 (Table S3). The Fornell–Larcker criterion was met for every pair of constructs across domains (motivation and constraints) but not within either domain. All HTMT values were below 0.85 (highest 0.73), so the four indicators were treated as distinct but related facets (Henseler et al., 2015).

The motivation configural model fell below the conventional CFI threshold (CFI = 0.822, RMSEA = 0.062; Table S2), so the invariance decisions for that scale are provisional. For the motivation and constraint scales, metric invariance was supported, but scalar invariance was not, even with five intercepts freed per scale (ΔCFI = −0.012 for both). Cross-national mean comparisons of motivation and constraints are therefore not justified. When the tests were repeated for the three countries that used the English version, full scalar invariance narrowly met the criterion for motivation (ΔCFI = −0.0099) but not for constraints (ΔCFI = −0.025; Table S2). The intercept noninvariance of the motivation scale thus arose mainly from the Japanese sample, whereas the constraint scale was noninvariant among the English-version countries as well. For the intention scale, the metric model was retained on its absolute fit (CFI = 0.989, RMSEA = 0.071; ΔCFI = −0.011; Table S2). With one intercept freed, partial scalar invariance held with two invariant intercepts, the minimum required

(Steenkamp & Baumgartner, 1998). TI7 did not reach metric invariance and was used only within countries.

Observed TI3 means were 5.12 in Australia, 3.30 in Japan, 5.00 in the Philippines, and 5.38 in Singapore (Table S3). Under the partial scalar model, the latent mean of intention was lower in Japan than in Australia (−1.67, 95% CI [−1.93, −1.41]), the Philippines (−1.55, 95% CI [−1.82, −1.28]), and Singapore (−1.98, 95% CI [−2.23, −1.73]), all $p < 0.001$ ($d = -1.01$ to -1.36).

4.2. Model Selection

Four profiles were retained in every country (Table S4). Among the solutions that met both criteria, BIC was lowest at five profiles in every country. At five profiles, however, the family with the lower BIC was EEI in Australia and VVI in the other three countries, and replication was uneven: in Singapore, the best solution was reached from only 3 of 2003 admissible starts, and in Australia and Japan, most starts of the five-profile VVI model ended in spurious solutions. Within the VVI family, which was used in every country, the lowest BIC among the solutions that met both criteria was at four profiles in Australia and at five profiles in the other three countries. At four profiles, VVI had the lower BIC in every country, and its solutions met both criteria.

4.3. Four-Profile Solutions by Country

Table 1 reports the four profiles in each country, and Figure 1 plots their means. In substantive terms, every country contained a group that rated travel motives highly but reported the strongest barriers and a group with little interest in travel, and three countries also contained a group that rated travel motives highly and reported few barriers. Profile labels describe patterns relative to the national mean and do not imply comparable levels across countries. Three profile types recurred. The first was a type high on both motivation and constraints, labeled aspiring but constrained, found in all four countries (11.6% to 24.2% of the national samples). In every country, this profile had the highest standardized means on both constraints and a higher mean on recognition motivation than on general experiential motivation. The second was a low-motivation type, found in all four countries: the indifferent profiles in Australia and the Philippines and two profiles each in Japan and Singapore. The third was a high-motivation, low-constraint type, labeled unconstrained enthusiasts, which formed a separate profile in Australia (41.6%), the Philippines (16.6%), and Singapore (42.5%) but not in Japan, although the pooled solution assigned 14% of the Japanese respondents to a profile with this pattern (Table S7).

Table 1. Four-profile solutions by country: shares, standardized indicator means, travel intention, and gender composition.

Country and Profile	Share (%)	*n* (Modal)	GenExp (*z*)	Recog (*z*)	Struct (*z*)	Intrin (*z*)	TI3 (1–7)	Women (%)
Australia (VVI; entropy = 0.901)								
Unconstrained enthusiasts	41.6	124	+0.41	−0.08	−0.45	−0.95	5.63	73
Aspiring but constrained	22.8	66	+0.36	+0.65	+0.97	+1.28	5.20	59
Mildly constrained	28.3	88	−0.23	+0.09	+0.08	+0.46	4.75	55
Indifferent	7.3	22	−2.60	−1.91	−0.76	−0.36	3.35	41
Japan (VVI; entropy = 0.892)								
Aspiring but constrained	15.7	45	+1.31	+1.34	+0.99	+0.99	4.49	67
Flat moderate majority	51.1	160	−0.03	+0.21	0.00	+0.24	3.52	57
Disengaged	7.7	23	−0.73	−0.62	−2.16	−1.97	2.91	70
Unmotivated	25.5	72	−0.52	−1.05	+0.05	−0.50	2.26	57
Philippines (VVI; entropy = 0.823)								
Aspiring but constrained	11.6	37	+0.87	+1.19	+1.31	+1.62	5.94	54
Unconstrained enthusiasts	16.6	49	+0.92	+0.79	−0.64	−0.70	5.30	69
Average majority	60.6	186	−0.11	−0.16	+0.04	−0.03	4.86	67
Indifferent	11.2	28	−1.68	−1.52	−0.65	−0.47	4.33	68

Table 1. *Cont.*

Country and Profile	Share (%)	*n* (Modal)	GenExp (*z*)	Recog (*z*)	Struct (*z*)	Intrin (*z*)	TI3 (1–7)	Women (%)
Singapore (VVI; entropy = 0.836)								
Unconstrained enthusiasts	42.5	132	+0.48	+0.12	−0.25	−0.76	5.95	61
Aspiring but constrained	24.2	74	+0.48	+0.78	+0.76	+1.11	5.35	41
Quiet unconstrained	10.3	28	−1.46	−1.42	−1.10	−1.01	5.27	57
Reluctant	23.0	66	−0.73	−0.41	+0.17	+0.69	4.40	41

Note. $n = 300$ per country. Profiles are ordered by TI3 within each country. Share and TI3 are posterior-probability-weighted; *n* (modal) and Women (%) are based on assignment by highest posterior probability. GenExp = general experiential motivation; Recog = recognition motivation; Struct = structural constraints; Intrin = intrinsic constraints; TI3 = three-item travel intention composite; VVI = varying indicator variances across profiles. Indicator means are standardized within country (*z* scores) and are not comparable in level across countries. In the Philippines, the constraint means of the indifferent profile varied across solutions within one log-likelihood unit of the retained solution (structural −1.07 to −0.65; intrinsic −0.74 to −0.46). Mean highest posterior probabilities and pairwise comparisons are given in Tables S4 and S5.

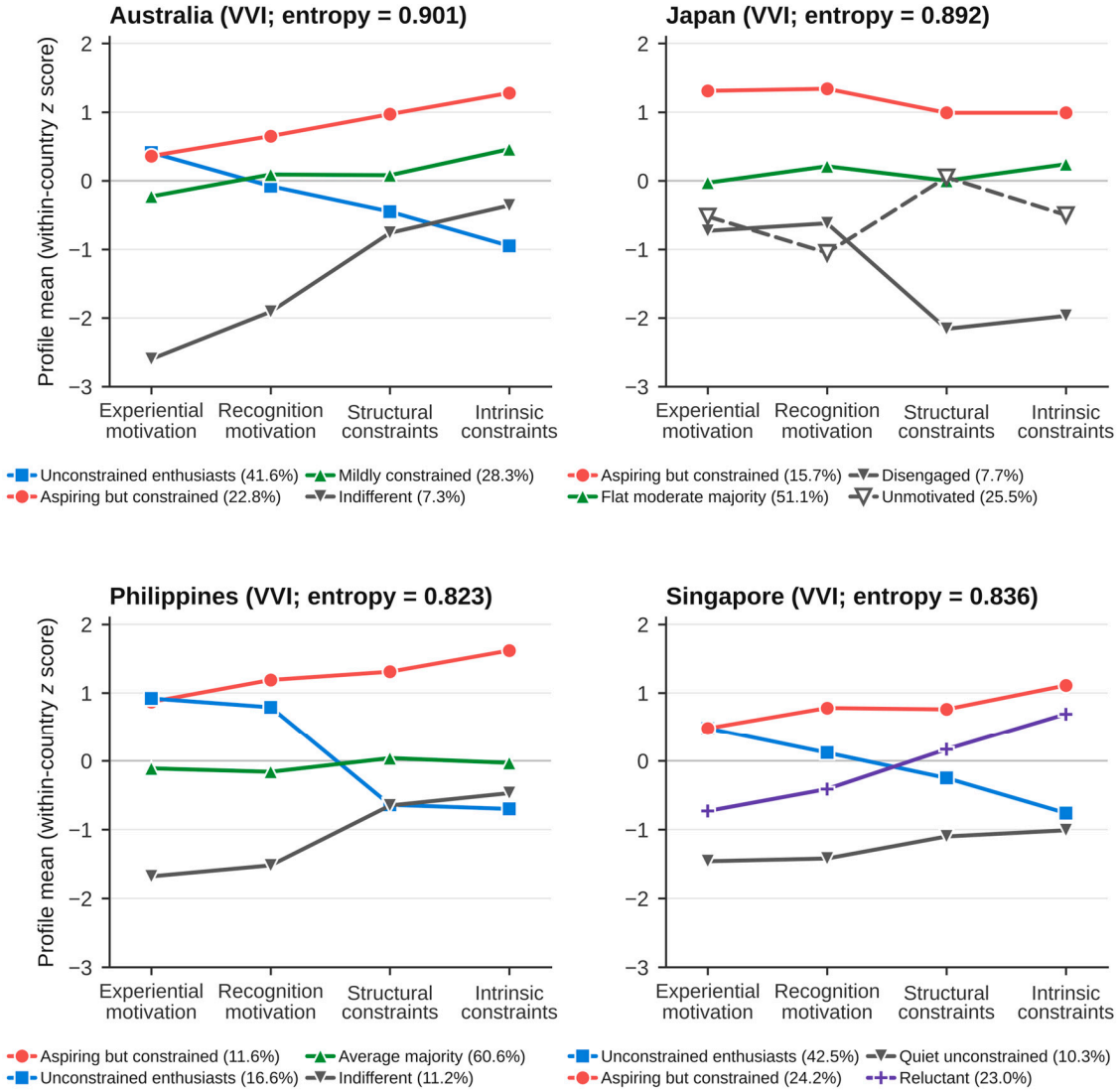


Figure 1. Four-profile solutions by country. Lines show profile means on the four within-country standardized indicators (*z* scores); the legend gives each profile's posterior-weighted share of the national sample, rounded as in Table 1. Colors denote profile type across countries (red = aspiring but constrained; blue = high motivation, low constraints; green = middle profile; gray = low motivation with low or average constraints; purple = low motivation with elevated intrinsic constraints). In Japan, where two gray profiles occur, the one closer to the national mean (unmotivated) is shown with a dashed line and open markers. The axis label experiential motivation refers to general experiential motivation.

Three countries contained a middle profile: the flat moderate majority in Japan (51.1%) and the average majority in the Philippines (60.6%) were close to the national mean on all indicators, and the mildly constrained profile in Australia (28.3%) was slightly below average on general experiential motivation and above average on intrinsic constraints. In Japan and Singapore, the two low-motivation profiles differed in their constraints. In Japan, the unmotivated profile was near or below average on both constraints, whereas the disengaged profile was far below average on both and varied widely in motivation. In Singapore, the quiet unconstrained profile was below average on all four indicators, whereas the reluctant profile was above average on both constraints, particularly on intrinsic constraints.

4.4. Profiles and Travel Intention

In Welch's analyses of variance, mean intention differed across profiles in all four countries (Table 1): Australia, $F(3, 82.3) = 14.19$, $\eta^2 = 0.173$; Japan, $F(3, 69.4) = 20.45$, $\eta^2 = 0.191$; the Philippines, $F(3, 76.7) = 11.73$, $\eta^2 = 0.077$; Singapore, $F(3, 95.4) = 21.79$, $\eta^2 = 0.180$; all $p < 0.001$. Pairwise Welch t-tests with Holm correction and classification-error-corrected BCH estimates gave the same pattern of significant differences (Table S5).

Two regularities were observed. First, in every country, a low-motivation profile had the lowest intention; this profile differed significantly from every other profile in Australia but not from the adjacent profile in the other three countries. The lowest-intention profile was near or below the national mean on both constraints except in Singapore, where the reluctant profile was above the mean on both. Second, the aspiring-but-constrained profile ranked first on intention in Japan and the Philippines and second in Australia and Singapore, where it scored below the enthusiasts. Its intention did not differ significantly from that of the enthusiasts in the Philippines or from that of the third-ranked quiet unconstrained profile in Singapore, but it significantly exceeded that of the middle profile in Australia, Japan, and the Philippines.

Gender composition differed across profiles in Australia, $\chi^2(3) = 13.32$, $p = 0.004$, and Singapore, $\chi^2(3) = 12.02$, $p = 0.007$, but not in Japan or the Philippines (both $p > 0.44$); in Australia and Singapore, the share of women was highest in the enthusiast profile (73% and 61%; Table 1).

4.5. Cross-Country Congruence of Profile Shapes

The recurring types were recognizable by shape across countries (Table S6). The aspiring-but-constrained profiles were paired with each other in every pair of countries (cosine 0.86 to 1.00); this similarity rests partly on shared elevation and, for the almost uniformly elevated Japanese profile (+0.99 to +1.34), almost entirely on elevation. The low-motivation profiles were also paired with each other (0.82 to 0.99), except for the reluctant profile in Singapore and the disengaged profile in Japan. The unconstrained enthusiasts were paired in the three countries in which they were extracted (0.73 to 0.96).

The flat moderate majority in Japan and the average majority in the Philippines lay too close to the origin to be matched (Table S6). The mildly constrained profile in Australia resembled a milder version of the reluctant profile in Singapore (cosine 0.80). The disengaged profile in Japan was paired with the enthusiast profiles (0.34 to 0.74), with which it shared low constraints but not high motivation. Its shape was closest to that of the quiet unconstrained profile in Singapore (0.81).

4.6. Japan: Composition, Association, and Intention Within Comparable Profiles

The association between profiles and intention was not weaker in Japan, which had the largest effect of profile membership on intention ($\eta^2 = 0.191$, compared with 0.077 to 0.180

elsewhere). Intrinsic constraints correlated positively with intention in Japan ($r = 0.33$) and the Philippines ($r = 0.14$) but negatively in Australia ($r = -0.11$) and Singapore ($r = -0.26$; Table S3). The composition of profiles, by contrast, differed: the Japan-only solution contained no separate enthusiast profile, and 51% of the Japanese respondents belonged to the flat moderate majority and 33% to the two low-motivation profiles.

The pooled solution reproduced the recurring shapes and provided a common frame of reference for composition (Figure 2; Table S7), although its entropy (0.790) was slightly below the criterion applied to the country solutions. On modal assignment, the all-high profile contained 12% to 14% of each national sample. The high-motivation, low-constraint profile, however, contained 33% to 37% of the Australian, Philippine, and Singaporean respondents but only 14% of the Japanese respondents, most of whom (31 of 42) belonged to the two low-motivation profiles of the Japan-only solution (Table S7). On the two intention items with invariant intercepts, these 42 respondents scored 3.21, compared with 5.15 to 5.95 among the members of the same pooled profile in the other three countries (Welch *t*-tests, all Holm-adjusted $p < 0.001$; Table S7). These respondents thus shared the pattern of the enthusiasts elsewhere but not their high intention. The flat profile contained 57% of the Japanese respondents, compared with 35% to 39% elsewhere. Composition alone cannot account for the national difference in intention. As a descriptive comparison on TI3, the highest Japanese profile mean (4.49) fell below the national means of the other three samples (5.00 to 5.38). On the two invariant intention items, intention was also lower within some comparable profiles (Table S10). The Japanese flat majority scored below the middle profiles in Australia and the Philippines and below every profile in Singapore. The Japanese unmotivated and aspiring-but-constrained profiles scored below their Philippine counterparts but not significantly below their Australian counterparts. Relative to Singapore, the unmotivated profile scored below both low-motivation profiles, whereas the aspiring-but-constrained profiles differed significantly only with posterior weighting (Table S10). Lower intention within some profiles thus contributes to the national difference.

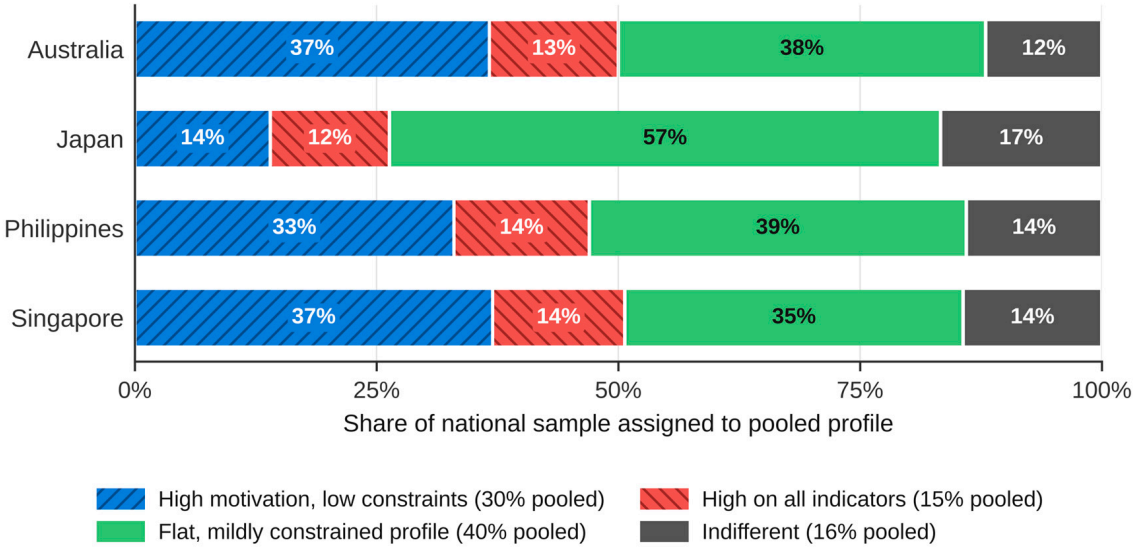


Figure 2. Distribution of each national sample across the four profiles of the pooled solution. Segment labels give the percentage of each national sample ($n = 300$) assigned to each pooled profile by highest posterior probability; the legend gives each profile's posterior-weighted share of the pooled sample. Segment lengths are based on the counts in Table S7. Percentages are rounded and may not sum to 100%. Colors denote profile type as in Figure 1.

4.7. Robustness Checks

With TI7, the rank order of profiles on intention and the pattern of significant pairwise differences were unchanged in every country (Table S5). Classification certainty was acceptable in every profile (mean highest posterior probability 0.87 to 0.99; Table S4). Without the two intrinsic constraint items on low desire to travel, 91% to 98% of respondents kept their profile, and the rank order of profiles on intention was unchanged. Without the 54 respondents who gave the same response to all motivation items, 82% to 97% of respondents kept their profile in Australia, the Philippines, and Singapore, and 56% in Japan. In Japan, most members of the two low-motivation profiles formed a single profile with the lowest intention (2.53), and the flat majority split into two profiles with similar intention (3.54 and 3.52). The aspiring-but-constrained profile still had the highest intention (4.56), and no enthusiast profile was extracted, although this solution was reached from only 4 of 504 admissible starts. The separation of the two Japanese low-motivation profiles is thus sensitive to uniform responders.

The five-profile solutions split one four-profile type in each country (Table S9). In Australia and Singapore, the enthusiasts split by structural constraints into two profiles with similar intention (5.73 and 5.60 in Australia, 5.87 and 5.80 in Singapore); in the Philippines, the aspiring-but-constrained profile split by elevation. In Japan, the unmotivated profile split, and the resulting profile with low recognition motivation and above-average structural constraints had the lowest intention (1.96). The aspiring-but-constrained type persisted in every country.

In the ipsatized re-estimation (Table S8), the five profiles with the longest centered mean vectors kept 50% to 80% of their members. The aspiring-but-constrained profiles, whose distinctiveness lies partly in elevation, kept 15% in Australia, 20% in Japan, 41% in Singapore, and 76% in the Philippines. An ipsatized profile with the high-motivation, low-constraint shape appeared in every country: it comprised 17% to 22% of the sample in Australia, the Philippines, and Singapore, where it matched the original enthusiast profile (cosine 0.83 to 0.97), and 10% in Japan, where its members came mainly from the disengaged and aspiring-but-constrained profiles.

5. Discussion

Three findings answer the research questions. The aspiring-but-constrained and low-motivation types recurred with similar shapes in all four countries, and the unconstrained enthusiast type recurred in three countries but not in Japan, where respondents with this pattern were fewer (RQ1). In every country, a profile with below-average motivation had the lowest intention, and the aspiring-but-constrained profile ranked first or second on intention (RQ2). Across profiles, intention followed general experiential motivation closely in Australia, Japan, and the Philippines, apart from nonsignificant reversals between adjacent profiles, and less closely in Singapore, where the profile lowest on both motivation indicators ranked third. Constraints showed no consistent relation to intention across countries. The association between profiles and intention was not weaker in Japan, and the composition of profiles differed. Intention was nevertheless lower in the Japanese flat majority than in comparable profiles in all three other countries, so composition does not account for the whole national difference (RQ3). These findings make three contributions. First, they provide person-centered evidence consistent with a precondition of the negotiation thesis, a precondition that variable-centered tests do not examine directly, and they document heterogeneity in motivation and constraints within these Generation Z samples. Second, they show how profiles can be compared across countries when scalar invariance fails. Third, they suggest that the lower travel intention of the Japanese respondents reflects the

composition of profiles and lower intention within comparable profiles rather than a weaker link between profiles and intention.

5.1. Theoretical Implications

The first implication concerns the negotiation thesis. Variable-centered tests of this thesis have found small or nonsignificant interaction effects (Khan et al., 2019; Son et al., 2008), and earlier segmentation studies grouped tourists by constraints alone (Vassiliadis et al., 2018; Yang et al., 2025). Profiles defined jointly by motivation and constraints can identify a group with high motivation and high constraints directly. In every country, such a profile comprised 12% to 24% of respondents and ranked first or second on intention, more in line with its motivation than with its constraints. In Australia and Singapore, however, this profile scored below the enthusiasts. In both countries, the two profiles reported similar general experiential motivation, but the enthusiasts reported lower recognition motivation and far lower constraints. Higher constraints were therefore still associated with lower intention in these comparisons. Both observations are consistent with the constraint-effects-mitigation and dual-channel models, in which constraints reduce participation while negotiation increases it (Hubbard & Mannell, 2001; Son et al., 2008). The evidence is indirect, because negotiation strategies were not measured. The same pattern is also consistent with compensatory travel, in which salient travel restrictions raised the willingness to pay for travel in some groups (Kim et al., 2024). Irrespective of the mechanism, the profiles are consistent with the precondition assumed by the negotiation thesis, to the extent that the reported constraints reflect actual barriers rather than response style.

Because all items were positively keyed, part of the uniformly high scores may reflect acquiescence in every country, particularly in Japan, where the profile was about one standard deviation or more above the national mean on all four indicators. In the other three countries, this profile was, on average, higher on constraints than on motivation, whereas in the Japanese profile the motivation means (+1.31, +1.34) exceeded the constraint means (+0.99 on both). Centered on its own mean, the Japanese profile was therefore positive on motivation and negative on constraints, as were the enthusiast profiles in the other three countries (cosine 0.85 to 0.99). This centered vector is short (0.34, below the 0.5 threshold used for matching), so the correspondence is provisional, and after ipsatization, 56% of the profile's members joined the flat ipsatized profile (Table S8). The Japanese profile is thus distinguished mainly by elevation, which this design cannot separate from response style. Multi-category rating scales are particularly susceptible to such styles (Dolnicar, 2021), a point taken up in the limitations.

The second implication concerns the low-motivation profiles. The lowest intention belonged to weakly motivated profiles that were near or below average on constraints, except for the Singaporean reluctant profile, which was above average on both constraints. The profiles thus distinguish low-intention respondents who report elevated constraints from those who report little interest (Jackson & Searle, 1985), although lack of interest may itself reflect antecedent constraints that suppress preferences (Jackson, 1990). A cluster analysis of German non-travelers likewise separated motivated from unmotivated types, and financial constraints were reported by at least half of each type (Popp et al., 2024). At five profiles, however, the Japanese profile with the lowest intention combined low recognition motivation with above-average structural constraints, so in Japan, whether the respondents with the lowest intention also report elevated constraints depends on the number of profiles. The intrinsic constraint indicator also includes two items on low desire to travel, and although removing them left the profiles largely unchanged, the distinction between constraint and disinterest remains partial.

The third implication concerns cross-national comparison, which Popp et al. (2024) suggested for non-traveler types. The extreme types were recognizable by shape in each country in which they were extracted, whereas the middle of the distribution was less consistent. Each national sample contained several distinct profiles; the profile types were largely shared across the samples, and the proportions of these types differed.

The fourth implication concerns Japan. The results support a compositional account only in part. The association between profiles and intention was at least as strong in Japan as elsewhere. The Japanese profiles, however, differed mainly in elevation, so acquiescence common to the indicators and the intention items may have strengthened this association. The positive correlation between intrinsic constraints and intention in Japan is consistent with shared acquiescence, although null and positive associations between reported constraints and participation have also been read as evidence of negotiation (Jackson et al., 1993). Relative to the national mean, the Japanese sample contained fewer respondents with high motivation and low constraints, and this shortage persisted after ipsatization, so the shortage is unlikely to be an artifact of response style alone. The combined share of the low-motivation profiles (33%), by contrast, was the same as in Singapore. Intention was also lower within some comparable profiles, mainly relative to the Philippines and Singapore, but these comparisons are partly confounded with the survey wave. Relative to Australia, only the flat majority differed significantly among the country-specific profiles, although the other two comparisons had limited power (as low as 0.53 for $d = 0.50$; Table S10). Accounts of self-effacement and lower perceived choice in Japan (Henrich et al., 2010) would predict differences mainly relative to Australia; the pattern gives them little support but cannot rule them out. In Japan, the aspiring-but-constrained profile, the flat majority, and the two low-motivation profiles comprised 16%, 51%, and 33% of the sample. These shares follow the same order as the three-way grouping in the Japan Tourism Agency (2018) report (12%, 52%, and 36%, rounded), although the correspondence is ordinal only, because the categories and cohorts are not equivalent.

5.2. Implications for Generation Z Travel Research

The results bear on three themes in the Generation Z literature. The first is heterogeneity within the cohort. Generation Z travelers have been described as economically cautious and price sensitive (Konieczna & Trybuś-Borowiecka, 2025; Nilsson Vestola & Ek Styvén, 2025) and as more restricted by time and study obligations than older cohorts (Melnyk & Vašaničová, 2026). In the present samples, the profile that fits this description, the aspiring-but-constrained type, comprised 12% to 24% of respondents, and the largest profile differed by country: unconstrained enthusiasts in Australia and Singapore, an average majority in the Philippines, and a flat majority in Japan. A description of the cohort as a whole would therefore combine different subgroups in different countries.

The second theme is the role of recognition motives. Pearce and Lee (2005) found recognition motives more important among younger and less experienced travelers, and recent work links the travel intentions of younger cohorts to social media content and to the status gained from sharing trips online, termed social return (Boley et al., 2026; Fong et al., 2025). In every country, the aspiring-but-constrained profile scored higher on recognition motivation than on general experiential motivation, whereas the enthusiast profiles scored lower on recognition motivation than on general experiential motivation. The combination of recognition motives with high constraints thus characterizes a specific subgroup rather than the cohort.

The third theme is cross-national comparison within a single cohort. Generational cohort theory attributes a shared mindset to shared formative experiences (Gardiner et al., 2014), and a cluster analysis of Generation Z travel preferences in four Euro-

pean and North American countries found that cluster membership differed by country (Ivasciuc et al., 2025). The present results extend this finding to samples from four Asia-Pacific countries: the same profile types recurred, but their proportions differed, and the high-motivation, low-constraint type comprised 14% of the Japanese respondents in the pooled solution, compared with 33% to 37% elsewhere. Within one cohort, the distribution of motivation and constraint combinations thus differed across the national samples, which supports the calls for comparative designs (Seyfi et al., 2025) and for comparisons between Western and Asian countries (Konieczna & Trybuś-Borowiecka, 2025). Because no older cohort was sampled, the study cannot show that these patterns are specific to Generation Z. The generational boundary defines the sampling frame rather than an explanatory variable, and cross-sectional data cannot disentangle cohort, age, and period effects (Melnyk & Vašaničová, 2026).

5.3. Methodological Implications

When scalar invariance fails, as it did here for the motivation and constraint scales, within-country standardization combined with latent profile analysis offers a way to compare countries. Profiles are defined on each country's own metric, compared in shape by a similarity index, and checked for composition in a pooled model. Full scalar invariance was not achieved in 42% of the 232 published tests that included a scalar step (Putnick & Bornstein, 2016), so the approach may apply to many cross-national data sets. The cost is that level differences are not estimated, a known limitation of within-country standardization (Fischer, 2004). The design shows how combinations of motivation and constraint are distributed within each country but cannot show whether the level of travel motivation is lower in Japan than in Australia. Lower intention within a comparable Japanese profile may therefore reflect a lower national level of motivation as well as a weaker translation of motivation into intention.

5.4. Practical Implications

Three implications follow from the profiles. First, constraint reduction is most relevant to the aspiring-but-constrained profile, which combined high intention with the highest structural and intrinsic constraints in its country. For this group, constraint reduction would need to address destination-related barriers, such as safety, language, and entry requirements, as well as cost and time. This implication is tentative, especially in Japan, because the profile may partly reflect response style. Second, removing constraints may do little to raise the intention of the low-motivation profiles. In every country, a low-motivation profile had the lowest intention, and in three of the four countries this profile reported constraints near or below the national mean. Demand creation, which aims to raise interest in what international travel offers, appears more relevant for these respondents, although a preference for staying home may make persuasion neither feasible nor desirable for some of them (Popp et al., 2024). Third, in Japan, the profile for which constraint reduction is most relevant comprised only 16% of the sample, whereas the two low-motivation profiles comprised 33% and the flat majority, whose intention was lower than that of comparable profiles elsewhere, comprised 51%. Measures that only remove barriers would therefore reach a small part of the Japanese sample.

5.5. Limitations

The design was cross-sectional and single-source, and intention is a proximal but imperfect indicator of behavior (Ajzen, 1991). The samples were quota samples from online panels rather than probability samples and included more women than men (59.7%), so the profile shares describe the samples rather than the national cohorts. Nonprobability

sampling may also affect which profiles are identified. Young adults who are underrepresented in online panels could form profiles that are absent from the present solutions, and overrepresented groups could alter the shapes of the profiles that were identified. The recurrence of the profile types across the four samples does not rule out such effects, because all four samples were drawn from the panels of the same online survey platform. The profiles and their associations with intention therefore need to be replicated in other samples (Spurk et al., 2020), preferably probability samples of the national cohorts. The Japanese sample covered ages 20 to 25 rather than 20 to 24 and was on average 0.5 to 0.9 years older than the Philippine and Singaporean samples. Excluding the 78 Japanese respondents aged 25 changed the Japanese TI3 mean from 3.30 to 3.32, so the wider age range is unlikely to account for the lower intention in Japan. Data were collected in two waves, in April and May 2026, so comparisons between countries surveyed in different waves are partly confounded with the collection period, although the interval was one month. This confound does not affect the comparison between Japan and Australia, which were surveyed in the same month. The Japanese version, the only one not in English, was not back-translated. Because the motivation scale reached scalar invariance among the three English-version countries, translation may account for part of the intercept noninvariance of that scale, although translation cannot be separated from response style in the Japanese sample. No comparison cohort was sampled, so the results cannot establish that the patterns are specific to Generation Z.

Because all items were positively keyed and rated on 7- and 9-point scales, and because response style was not measured separately, acquiescent and midpoint responding may have affected the all-high, all-low, and flat profiles (Dolnicar, 2021), and within-country standardization does not remove such individual differences. Uniform responding was more common in Japan, where 9.7% of respondents gave the same response to all motivation items and 11.0% to all constraint items (2.0% to 3.3% and 4.0% to 5.0% elsewhere); uniform constraint responses, in Japan mostly at the scale midpoint, were not excluded in a robustness check (Table S7). Ten of the 23 members of the Japanese disengaged profile gave identical answers to all motivation or all constraint items, mostly at the scale minimum, and all 7 Japanese respondents who rated every constraint item at the minimum fell into this profile, so it may reflect a response pattern more than a substantive type. Several measurement properties were marginal: the fit of the motivation configural model, average variance extracted below 0.50 for three of the four indicator constructs, discriminant validity within domains, and the congruence of structural constraints in Japan. Intrapersonal and interpersonal constraints could not be examined separately. Reported time and money constraints may also partly reflect competing priorities or a preference not to travel (Popp et al., 2024).

Within the VVI family, the four-profile solution had the lowest BIC only in Australia. The five-profile solutions with the lower BIC (EEI in Australia and VVI elsewhere) split one type in each country (Table S9). In the Philippines and Singapore, solutions within one log-likelihood unit of the best all gave the same rank order of profiles on intention (Table S4). Profile labels are interpretive, and classification error was corrected only for the comparisons within countries; the comparisons involving Japanese profiles rest on matching by type and on modal assignments (Table S10). The Philippine solution had the lowest entropy (0.823) and the smallest effect of profile membership on intention ($\eta^2 = 0.077$), so the results for that country warrant more caution. The country samples ($n = 300$) were smaller than the sample of about 500 suggested for identifying the number of profiles, and two profiles (22 and 23 respondents) met the 5% criterion set in advance but fell below the 25-case rule of thumb (Spurk et al., 2020). Pairwise comparisons involving these two profiles had power of 0.49 to 0.61 for a medium difference ($d = 0.50$) at an unadjusted α of 0.05.

5.6. Future Research

First, longitudinal designs could test whether aspiring-but-constrained young adults become enthusiasts as constraints ease or become unmotivated as aspirations fade. Second, negotiation strategies and efficacy should be measured directly (Hubbard & Mannell, 2001; Hung & Petrick, 2012) so that the role of negotiation can be tested within profiles. Third, behavioral outcomes such as actual departures would show whether the high intention of the aspiring-but-constrained group is realized. Fourth, shorter instruments with balanced item keying that reach scalar invariance would allow level comparisons and reduce the influence of response styles. Binary formats and metric formats such as slider scales promise higher test–retest reliability and fewer response-style artifacts (Dolnicar, 2021), so they deserve a direct comparison with the 7- and 9-point formats used here.

6. Conclusions

This study set out to identify subgroups of Generation Z defined jointly by travel motivation and travel constraints in Australia, Japan, the Philippines, and Singapore, to relate these subgroups to travel intention, and to examine whether the lower travel intention of Japanese respondents reflects the composition of the subgroups. Three findings answer these questions. First, profile types defined jointly by motivation and constraints recurred across the four samples: a profile that combined above-average motivation with the highest constraints in its country comprised 12% to 24% of respondents in every country, a low-motivation profile had the lowest intention in every country, and an unconstrained enthusiast profile appeared in every country except Japan, where respondents with this pattern were fewer. Second, the aspiring-but-constrained profile ranked first or second on intention. Its existence is consistent with a precondition of the negotiation thesis, and its rank suggests that intention in this group follows motivation more closely than constraints, although the profile may partly reflect acquiescence, especially in Japan. Third, in Japan the association between profiles and intention was not weaker, but the sample contained fewer high-motivation, low-constraint respondents and a large flat majority whose intention was lower than that of comparable profiles elsewhere, so composition accounts for only part of the national difference. Within-country standardization combined with latent profile analysis made these comparisons possible without scalar invariance. The four-profile solutions serve as a common framework for cross-national comparison and do not necessarily represent the optimal solution for each country. Among the solutions that met the criteria set in advance, BIC was lowest at five profiles in every country; four was the largest number of profiles at which, in every country, the same model family had the lower BIC and met these criteria. The profiles suggest that constraint reduction is most relevant to the aspiring-but-constrained group and demand creation to the low-motivation profiles.

Supplementary Materials: The following supporting information can be downloaded at https://www.mdpi.com/article/10.3390/tourhosp7110378/s1. Table S1: Item wordings and descriptive statistics of the study measures; Table S2: Measurement invariance of the indicator scales and the intention measures across the four countries; Table S3: Descriptive statistics, reliability, and discriminant validity of the study measures; Table S4: Model selection for the latent profile analyses by country; Table S5: Pairwise comparisons of travel intention (TI3) between profiles: Welch tests on modal assignment and BCH estimates; Table S6: Cosine similarity of matched profile shapes between countries; Table S7: Pooled four-profile solution: standardized indicator means and composition by country; Table S8: Ipsatized re-estimation of the four-profile solutions: retention of relative patterns and members; Table S9: Five-profile solutions and their correspondence with the four-profile solutions; Table S10: Comparisons of travel intention between Japanese profiles and comparable profiles in the other countries.

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