Community Dental Health (2016) **33,** 225–231
Received 24 August 2015; Accepted 11 January 2016

doi:10.1922/CDH_3842Balasubramanian07

Development of life story experience (LSE) scales for migrant dentists in Australia: a sequential qualitative-quantitative study

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Introduction: The integration of qualitative and quantitative approaches introduces new avenues to bridge strengths, and address weaknesses of both methods. ***Objective:*** To develop measure(s) for migrant dentist experiences in Australia through a mixed methods approach. ***Methods:*** The sequential qualitative-quantitative design involved first the harvesting of data items from qualitative study, followed by a national survey of migrant dentists in Australia. Statements representing unique experiences in migrant dentists' life stories were deployed the survey questionnaire, using a five-point Likert scale. Factor analysis was used to examine component factors. ***Results:*** Eighty-two statements from 51 participants were harvested from the qualitative analysis. A total of 1,022 of 1,977 migrant dentists (response rate 54.5%) returned completed questionnaires. Factor analysis supported an initial eight-factor solution; further scale development and reliability analysis led to five scales with a final list of 38 life story experience (LSE) items. Three scales were based on home country events: health system and general lifestyle concerns (LSE1; 10 items), society and culture (LSE4; 4 items) and career development (LSE5; 4 items). Two scales included migrant experiences in Australia: appreciation towards Australian way of life (LSE2; 13 items) and settlement concerns (LSE3; 7 items). ***Conclusion:*** The five life story experience scales provided necessary conceptual clarity and empirical grounding to explore migrant dentist experiences in Australia. Being based on original migrant dentist narrations, these scales have the potential to offer in-depth insights for policy makers and support future research on dentist migration.

Key words: *dentists, human migration, methodology, life story experience scales, Australia*

Introduction

The use of both qualitative and quantitative methods to measure complex social phenomena is an innovative contemporary methodological practice (Creswell and Clark, 2010; Moffatt *et al.*, 2006; Onwuegbuzie *et al.*, 2009; Tashakkori and Teddlie, 2010). Qualitative methods, such as interviews or focus groups, are mainly exploratory and provide a preliminary understanding on the phenomena of interest (Denzin and Lincoln, 2011). While adequate space exists to explore meanings that individuals or groups ascribe to the phenomena, it is difficult to demonstrate rigor in qualitative methods (Carr, 1994). The researchers' often active involvement in qualitative fieldwork can introduce subjective bias (Carr, 1994). Qualitative studies also involve a small group of participants, who are not necessarily representative of the study population. On the other hand, quantitative methods, such as population surveys, provide more precise statistical tools towards the measurement of social phenomena (Newman, 2013) yet may miss contextual detail to the phenomena, and be limited to the theory or position adopted by the researcher (Carr, 1994). The integration of both qualitative and quantitative approaches introduces new avenues to bridge strengths, and address weaknesses of both methods.

Our phenomena of interest were migrant dentists' experiences in Australia. Migrants comprise a significant proportion of the dental workforce in Australia (Hawthorne, 2012; Productivity Commission, 2005). The recent trend of increased migration from poorer regions of the world (mainly from the South Asia and Africa) has introduced new challenges both for the countries' dentists originate from, and to Australia (Balasubramanian *et al.*, 2015a;b;c;d). Source countries are required to understand the reasons for dentist migration, to better monitor and regulate migration, particularly if it is seen as excessive (Balasubramanian *et al.*, 2015b;c). Destination countries such as Australia, while facing ethical challenges of contributing to brain drain, may need to better understand the settlement challenges faced by migrants (Balasubramanian *et al.*, 2015a;c).

To date, there exists very little evidence on migrant dentist experiences both in Australia and elsewhere. Dentist migration is argued to be somewhat different to physician and nurse migration, due to differences in the organisation of dental services (Balasubramanian and Short, 2011a;b). Dentists mainly practice in private clinics (Kandelman *et al.*, 2012). Migration is also voluntary and does not necessarily include active recruitment (Balasubramanian and Short, 2011a). Qualitative methods carry the potential to delve into migrant experiences, and provide a more detailed understanding specific to dentist migration. However, qualitative evidence alone is not sufficient for policy decisions. Quantitative research can provide valuable statistical evidence and a finer measurement of migrant dentist experiences, preferred for policy decisions. One popular theory of integrating both methods is to use qualitative evidence towards instrument development for a survey questionnaire (Creswell, 2003).

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This approach has the potential to reflect the sentiments of migrating dentists, and can be later fine-tuned using quantitative methods (such as factor analysis) once the survey is administered. Therefore, the purpose of the study was to develop one or more measures to help us better understand the migration and settlement experiences of migrant dentists in Australia through the use of both qualitative and quantitative methods.

Methods

This study follows a sequential mixed method design (Creswell, 2003), where qualitative research contributed to the development of the data items for the quantitative survey questionnaire. Our approach is rooted in a pragmatic philosophical position (Patton, 1988; Greene, 2008; Greene and Caracelli, 1997). The methodological uniqueness of both qualitative and quantitative methods is preserved, and the point of integration involved the harvesting of qualitative data items for use in the quantitative survey.

Qualitative fieldwork involved in-depth interviews of 51 migrant dentists, conducted during a six-month period between July and December 2011. Semi-structured interviews were used to facilitate the diachronic narration (Weiss, 1994) of participant's life story over time. The first part of the interviews focussed on home country experiences that led them to migrate to Australia and the second part on settlement experiences in Australia. Life story descriptions were written for each participant (Cohen *et al.*, 2000), assisting detailed exploration on the breadth of individual descriptions. This preliminary analysis brought similar experiences under certain life story segments (secondary codes), and later used a latent analysis to build themes for the main qualitative study. Further information on qualitative methods and findings based on the emergent themes are published elsewhere (Balasubramanian *et al.*, 2014, 2015a; b).

Participant narrations within each life story segment (home country life segments included: early life and career choice, dental student life, professional life, social and political life, travels and coming to Australia; Australian segments included social and cultural life in Australia, qualifying examinations and professional life in Australia) were analysed and reduced to a smaller representative collection of statements, so as the collection substantially represented all participant experiences within each life story segment. Statements (or items) were later edited by the research team mainly to reduce their length and improve readability, but without altering their original meanings.

Quantitative research consisted of a national survey of all migrant dentists resident in Australia (n=1,977) conducted between January and May 2013 (Balasubramanian *et al.*, 2015d). All migrant dentists registered with the Australian Dental Association, or enrolled as a graduate student in any of the dental schools in Australia were surveyed. Migrants dentists were asked to complete a self-administered questionnaire. A broad range of data including demographic, migration and residence characteristics, practice profiles, job satisfaction and life story experience were collected. Further details on the survey methods and other findings are published elsewhere (Balasubramanian *et al.*, 2015d). The life story experience of migrant dentists was collected through the battery of items harvested from the qualitative research. These items were ordered systematically in the questionnaire to show the gradual progression of key life story events, to facilitate ease in answering questions. Items were scored from 1, strongly disagree to 5, strongly agree - a higher score representing greater agreement.

The distribution of responses for all the life story experience items was first examined using percentages and measures of central tendency and dispersion. Skewness values of less than ±0.20 were used to represent symmetry in the distribution. Factor analysis (principal components with Varimax rotation) was used to examine the battery of life story experience items for underlying component factors (Pett and Lackey, 2003). Prior studies in scale development have used a similar factor analysis approach (Brennan and Spencer, 2001; 2008). The use of eigenvalues greater than 1.0 is commonly used in retaining factors; however this approach has a tendency to extract too many factors, especially when there are 50 or more variables (Child, 2006; Pett and Lackey, 2003). Scree plots offer a graphical assessment of the factors, but are subjective (Pett and Lackey, 2003). Likewise, the substantial importance attached to the proportion of variance explained by each factor also involves a judgment by the researcher, and may be set to what the researcher considers important (Brennan and Spencer, 2008). Our judgment on retaining factors was based on the reasonableness brought by the factor solution, and prior knowledge on the subject matter. Further, both sampling adequacy and communality were assessed. A sampling adequacy with values above 0.50 is acceptable; suggesting the subset of variables used in the analysis can represent a larger domain (Kim and Mueller, 1978). Communality values above 0.30 suggest the factors account for a high percentage of the sample variance of each variable (Child, 2006). The final factor-based scales were constructed giving consideration both to the reasonableness of the factors and reliability of the scales.

Scale scores for all the resultant factor-based life story experience scales were calculated by averaging the responses to individual items so retaining the original potential score range of 1 to 5 with all items contributing equally (Striener *et al.*, 1995). The distribution of the resultant responents recording each score was presented as percentages with means, skewedness and standard deviations. Reliability of the scales was assessed by Cronbach's alpha coefficient of inter-item reliability; a minimum value of 0.60 was chosen as acceptable (Nunnaly and Bernstein, 1994; Striener *et al.*, 1995).

Ethical approval was obtained from an approved Human Research Committee in Australia. Participation was voluntary. Written informed consent was obtained from all participants of the qualitative study. The national survey was conducted as mailed self-complete questionnaire; consent was therefore implied by the return of the completed questionnaire.

Results

Eighty-two statements were harvested from the preliminary qualitative analysis; 36 statements based on home country experiences and 46 statements based on settlement experiences in Australia (see online-only Annexe 1).

These statements represented unique experiences in the life stories of participants and were aggregated from the life story segments. The final 82 item battery of statements was deployed in the quantitative study (national survey). A total of 1,022 migrant dentists (response rate 54.5%) responded to the survey.

Twenty-five factors with eigenvalues ≥1 were extracted from the initial factor analysis. The first four factors accounted for just under a quarter (24.2%) of the variance explained. Examination of the scree plot suggested solutions with four to ten factors were possible. These three criteria (eigenvalues, variance explained and scree plot) were examined for plausibility. An eight-factor solution, including 51 life-story experience items, was preferred, mainly based on the conceptual integration of factors, and on the grounds of parsimony.

The results of the final factor analysis are presented in Table 1. All values of items with a factor loading ≥0.4 are provided. In general, the sampling adequacy was above 0.50 and was considered acceptable. Communality values for most of the items were above 0.30, suggesting that factors brought out a larger percentage of the sample variance of each variable. Seven items (5, 24, 27, 42, 60, 62 and 74) had communality values <0.30, yet were included in the scale development based on researcher judgment. The first factor (LSE1) comprised of 10 items and accounted for experiences (or concerns) related to "health system and general lifestyle concerns" in home countries of migrant dentists. The items in this scale seem to highlight the misgivings associated with migrant dentists' home country systems and unmet expectations on living conditions. Two additional factors LSE 4 (including four items) and LSE6 (including five items) explained home country experiences of migrant dentists related to "society and culture", and "career development" respectively. Both these scales brought out the attraction of migrant dentists towards their home country environments. Twelve items loaded on the second factor (LSE2) highlighting migrant dentists' "appreciation towards Australian way of life". Seven items accounting for "settlement concerns" in Australia loaded on the third factor (LSE3), and three items pointing towards "negative perceptions" of migrant dentists in Australia loaded on LSE7. Two factors seem to be neutral to home country or Australia, pointing towards general issues such as "future aspirations" (LSE5: five items), and "practice beliefs" (LSE8: four items). Five items (2, 27, 29, 44 and 60) loaded with a negative value in the factor analysis, and their direction was reversed in subsequent scale development.

Table 2 presents the distribution of these factor-based life story experience scales. These scales were treated as continuous variables, ranging from 1 (strongly disagree) to 5 (strongly agree). Scores greater than or equal to four represent agreement with the life-story experience measured by the particular scale. A larger proportion of the respondents were in agreement with the "appreciation towards Australian way of life" (55.2%) and "society and culture" in home country (54.4%) scales, in comparison with the other scales. All scales, except "practice belief" scale (LSE8) had a Cronbach alpha coefficient greater than 0.6, hence acceptable inter-item reliability; LSE8 scale was dropped. Item 3 was excluded from the "career development" (LSE6) scale, as this improved the reliability score for the scale. Further, the percentage of responses in agreement with the "future aspirations" (LSE5) and "negatives perceptions" in Australia (LSE7) were small, 1.2% and 0.8% respectively. Therefore, these two scales (LSE5 and LSE7) were dropped.

Table 3 provides the final list of 38 life story experience items grouped into five scales LSE1 to 5, (LSE6 was renamed as LSE5), along with the distribution of responses corresponding to each item in the scale. The first scale, "health system and general lifestyle concerns" (LSE1) had two items (items 2 and 10) that were negatively worded to the construct brought by the scale. "Society and culture" scale (LSE4) had one item (item 34) that was also negatively worded. Four items (1, 6, 7 and 34) had a positive skew, with a larger percentage of responses towards strongly disagree. Five items (2, 3, 4, 24 and 27) had a skewness value of less than ±0.20, and the distribution of responses was considered more or less symmetrical. All the remaining items had a negative skew.

Discussion

The study developed measures for migrant dentist experiences in Australia through the use of a sequential qualitative-quantitative approach. The use of mixed methods was pursued for its potential to explain migrant dentist (migration and settlement) experiences in Australia. Owing to limited practical examples of the integration of qualitative and quantitative methods towards instrument development for population surveys (Creswell and Clark, 2010), we argue this study provides an innovative solution.

The harvesting of data items from the qualitative research occurred during the preliminary qualitative analysis stage, prior to latent analysis and the development of emergent themes. This approach was sufficient as the primary purpose was to select unique experiences from life story events that can be administered in a population survey. This strategy provided an avenue to discuss the final factor analysis results against the final qualitative study findings. Some theorists on the use of mixed methods argue that such triangulation of findings from both methods improves the conceptual clarity of the phenomena under study (Creswell and Clark, 2010; Greene *et al.*, 1989;). We offer triangulation only as a strategy to provide empirical depth to the final factor analysis scales. We do not use triangulation of findings to guide the actual factor analysis or any part of the quantitative study, other than harvesting the data items. The integration of methods was kept minimal to preserve the methodological uniqueness of qualitative and quantitative methods.

Participants for both the qualitative interviews and national survey were based in Australia (Balasubramanian *et al.*, 2015b,d). Therefore, resultant measures are more likely to represent migrant dentist experiences in Australia; further testing of the scales is required for migrant dentists who emigrated back home or moved elsewhere. We attempted through the national dental association membership directory, and dental schools register to make the national survey comprehensive but it did not include unemployed migrant dentists, those in non-dental jobs or those in non-dental study programs (Balasubramanian *et al.*, 2015d).

Table 1. Factor analysis: the final statistics

Item No.	Description of item	Factor loadings (≥0.4)for LSE scales								h^2
		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	
3	I choose dentistry as a career by accident						-0.44			0.31
5	I felt I had good hand skills, so I opted for dentistry						0.41			0.20
18	Private dental practice was more lucrative than public practice back home								0.41	0.31
19	I was very happy with my professional career in my home country						0.56			0.51
20	I had very good mentors in my home country						0.51			0.50
21	I had adequate professional development opportunities in my home country						0.55			0.49
23	I had a very active social life in my home country				0.72					0.55
24	I come from a tight-knit family				0.50					0.29
25	I loved the lifestyle back in my home country				0.65					0.48
27	I did not have enough time for social activities in my home country				-0.60					0.17
28	I was affected by corruption in my day to day practice life in my home country	0.53								0.39
29	I thought the health service infrastructure in my home country was very good	-0.66								0.45
30	Patients did not receive quality care in public clinics/hospitals back home	0.66								0.49
32	There was too much competition between dentists in my home country	0.54								0.46
33	Dentistry was not seen as a priority for policy makers in my home country	0.54								0.36
34	The quality of dental practice was not good in my home country	0.57								0.48
35	There are too many dental colleges/schools in my home country	0.56								0.46
36	The oral health service system in my home country needs improvement	0.67								0.52
37	The living standards in Australia are better than my home country	0.56								0.50
38	I like the cultural diversity in Australia		0.54							0.34
39	Australians have been very kind to me		0.69							0.49
40	I had problems communicating here							0.54		0.42
41	I found it strange that people couldn't understand my accent over here							0.52		0.35
42	Religion was a big shock for me in Australia							0.42		0.26
43	I found it easy to settle down in Australia		0.56							0.46
44	Australia is somewhat similar to my home country	-0.52								0.47
45	I haven't felt any issues of discrimination in Australia		0.49							0.37
47	I have made very good friends here in Australia		0.52							0.32
48	The quality of life is better in Australia		0.55							0.36
49	Australia is a safe place to live		0.55							0.49
51	The ADC exam process is very long			0.57						0.39
53	Support structures to prepare for the exam are very important			0.51						0.35
55	The standards of dentistry in Australia are very high		0.52							0.33
58	Professional life in Australia is enjoyable		0.63							0.47
59	Private dental practice is more rewarding than public in Australia								0.55	0.42
60	The public sector in Australia offers a very good environment to work in								-0.48	0.29
62	It takes lot of hard work to start a private practice in Australia			0.46						0.27
63	Working in private practice is enjoyable		0.47							0.39
64	In general, the gap between public and private dentistry is very big in Australia							0.57		0.41
65	There are good professional development opportunities in Australia		0.51							0.34
67	Specialist registration requirements in Australia are difficult			0.56						0.36
69	In future, I would like to see myself a bit higher in professional status			0.49		0.41				0.52
71	I am aiming to do some academic work in the future					0.46				0.38
73	I want my children to understand the culture of my home country			0.43						0.31
74	I am planning to spend more time with my family in the future			0.41						0.29
75	I find myself very comfortable in the place I am staying right now in Australia		0.47							0.39
76	I am thinking of moving to a different state/territory in Australia					0.69				0.57
78	I intend to migrate to another foreign country in the future					0.51				0.45
80	I still haven't decided where I would like to live in the future					0.64				0.50
81	I am considering moving to the countryside for financial reasons					0.59				0.42
82	I love Australia very much		0.62							0.46
	Variance %	9.28	7.33	4.83	2.73	2.69	2.50	2.35	2.16	2.09

Note: h2=communality. Method = Principal components; Rotation = varimax. Kaisers measure of sampling adequacy = 0.812. This table only presents items that loaded in the factor analysis. For the full list of 82 life story experience items, please see online-only Annexe 1. LSE scales are: 1, Health system and general lifestyle concerns; 2, Appreciation towards Australian way of life; 3, Settlement concerns; 4, Society and culture; 5, Future aspirations; 6, Career development; 7, Negatives perceptions; 8, Practice beliefs

Table 2. Distribution and internal consistency of the life story experience (LSE) scales

	Description of scale	*No of items*	*N*	*Distribution of responses (%)*					*Skew*	*Mean*	*(SD)*	*Cronbach α*	*Agree % †*
				≤1	*≤2*	*≤3*	*≤4*	*≤5*					
LSE1	Health system and general lifestyle concerns	10	938	0.1	12.0	58.8	94.3	100.0	0.13	2.89	(0.71)	0.82	8.6
LSE2	Appreciation towards Australian way of life	13	925	0.0	0.0	2.8	52.8	100.0	-0.37	4.01	(0.47)	0.81	55.2
LSE3	Settlement concerns	7	863	0.0	0.1	7.4	76.0	100.0	0.14	3.75	(0.50)	0.63	34.4
LSE4	Society and culture	4	968	0.1	1.1	13.9	62.5	100.0	-0.46	3.89	(0.68)	0.60	54.4
LSE5	Future aspirations	5	940	5.0	47.3	89.8	99.8	100.0	0.30	2.18	(0.69)	0.71	1.2
LSE6	Career development	4	947	0.1	2.1	19.4	73.0	100.0	-0.44	3.70	(0.70)	0.60	42.8
LSE7	Negatives perceptions	3	956	29.0	72.1	94.9	99.7	100.0	0.71	1.81	(0.73)	0.66	0.8
LSE8	Practice beliefs	4	937	0.0	0.3	13.8	77.3	100.0	-0.04	3.69	(0.55)	0.48	35.3

Note: Shaded areas represent home country based scales; Unshaded represent scales based on settlement experiences in Australia Reversals are corrected; Item 40 excluded from LSE6. † Percentage Agreeing or Strongly Agreeing

The first scale 'health system and general lifestyle concerns' (10-item LSE1) highlighted shortcomings in migrant dentist home country health systems and living conditions. The first item captured corruption in the home country and was specific towards migrant's day-to-day practice. Items 2 to 8 were more generic to reflect on health system issues in home country (such as health infrastructure, quality of care, workforce situation, and overall oral health system). Item nine focussed on living conditions. The last item was a comparative view of Australia and home country system, which seems to explain both health system and living conditions. Prior qualitative study has also identified the disappointment of migrant dentists towards home country systems (Balasubramanian *et al.*, 2015b). Key issues such as inadequate professional opportunities, lack of professional and social ethos, and political unrest contribute to migrant experiences and help explain their desire to migrate to Australia (Balasubramanian *et al.*, 2015b).

The "appreciation towards Australia way of life" scale (13-item LSE2) brought out positive sentiments towards society, culture and professional life in Australia. Items 11, 16 and 17 identified issues such as cultural diversity, quality of life and safety in Australia. Items 12 to 15 were focussed on Australian people and brought out key matters such as discrimination. Items 18 to 21 captured professional life in Australia, while items 22 and 23 were more generic and brought out affinity to Australia. The prior qualitative study provided an explanation towards the cultural adaptation process of migrant dentists in Australia, portraying the importance of family, friends and organisational structures. A detailed understanding of these issues is essential to enable integration of migrant dentists, so as to enable their contribution to Australian society. There is considerable support for similar arguments in the international literature on health professional migration (Cerdin *et al.*, 2014). The "settlement concerns" scale (LSE3) also highlighted similar issues as LSE2 but brought out negatives in migrant dentists' Australian experience. Two items (24 and 25) brought out issues about the qualifying examination process; three items (26, 27 and 28) focussed on professional issues and the last two items (29 and 30) were more on family and culture. Prior qualitative study has identified the difficulties (financial, family and time constraints) migrant dentists go through while taking the qualifying examination (Balasubramanian *et al.*, 2014). As both these scales (LSE2 and LSE3) capture the same concepts, it is possible that future research can combine both these scales into a single scale.

The home country-based 4-item scales (LSE4 and LSE5) captured affinity towards "society and culture" and "professional development" in home country. The items in the "society and culture scale" highlighted issues such as social adherences and family bond. The "professional development" scale highlighted happiness towards career and availability of professional opportunities in the home country. Prior qualitative study provides evidence of a culture in developing countries to see migration to well-developed countries as a career or status symbol (Balasubramanian *et al.*, 2015b). Therefore, an affinity to both these scales indicates little likelihood of return migration. The future use of scales needs to evaluate how well these two scales perform in understanding migrant motivations towards emigrating back to their home country or elsewhere.

Conclusions

The sequential qualitative-quantitative study developed a 38-item life story experience measure based on the original narrations of migrant dentists in Australia. The five scales, three based on home country events and two based on events in Australia, provided necessary conceptual clarity and empirical grounding to explore into migrant dentist experiences in Australia. Overall, these life story scales provide an avenue for policy makers and researchers to better assess migrant dentist experiences in a host country.

Acknowledgements

The first author was supported by an Australian Postgraduate Research Scholarship during the time the fieldwork and analysis were conducted and later support from an NHMRC's Centre for Research Excellence in Health Services Research (No. 1031310). This study was also supported by a grant from the Australian Dental Research Foundation (64-2011). We are grateful for the assistance offered from colleagues in the Australian Dental Association Inc. (Federal Branch) and the Australasian Council of Dental Schools (ACODS) for assistance in the fieldwork. The contents are solely the responsibility of the administering institution and authors, and do not reflect the views of NHMRC.

Table 3. Life story experience scales/items and distribution of responses ranging from 1 (strongly disagree) to 5 (strongly agree)

Scale / *Item*	*Description of scale/item*	*N*	*Distribution of responses (%)* 1	2	3	4	5	*Skew*	*Mean (SD)*
LSE1	**Health system and general lifestyle concerns**								
1	I was affected by corruption in my day to day practice life in my home country.	960	47.7	25.5	13.1	9.2	4.5	1.06	1.97 (1.17)
* 2	I thought the health service infrastructure in my home country was very good.	962	7.0	25.9	24.6	32.3	10.2	-0.12	3.13 (1.12)
3	Patients did not receive quality care in public clinics/hospitals back home.	962	15.5	31.0	21.0	24.9	7.6	0.15	2.78 (1.20)
4	There was too much competition between dentists in my home country.	960	9.3	31.3	27.9	22.5	9.1	0.17	2.91 (1.12)
5	Dentistry was not seen as a priority for policy makers in my home country.	959	3.0	14.0	30.7	39.2	13.1	-0.37	3.45 (0.99)
6	The quality of dental practice was not good in my home country.	959	29.2	33.0	21.3	13.2	3.3	0.56	2.29 (1.12)
7	There are too many dental colleges/schools in my home country.	958	19.1	33.3	21.8	16.4	9.4	0.40	2.64 (1.23)
8	The oral health service system in my home country needs improvement.	953	2.9	8.8	20.0	46.7	21.5	-0.78	3.75 (0.99)
9	The living standards in Australia are better than my home country.	961	2.4	9.6	23.3	41.9	22.8	-0.62	3.73 (0.99)
* 10	Australia is somewhat similar to my home country.	958	7.4	19.3	17.2	36.0	20.0	-0.42	3.42 (1.22)
LSE2	**Appreciation towards Australian way of life**								
11	I like the cultural diversity in Australia.	960	1.1	3.1	19.5	55.1	21.1	-0.79	3.92 (0.79)
12	Australians have been very kind to me.	958	0.5	3.2	17.6	52.8	25.8	-0.67	4.00 (0.78)
13	I found it easy to settle down in Australia.	959	1.7	8.0	12.2	42.6	35.5	-1.00	4.02 (0.97)
14	I haven't felt any issues of discrimination in Australia.	957	5.6	16.6	16.9	34.8	26.0	-0.54	3.59 (1.20)
15	I have made very good friends here in Australia.	960	0.8	3.9	12.9	50.4	32.0	-0.95	4.09 (0.82)
16	The quality of life is better in Australia.	959	1.6	3.9	16.2	47.3	31.1	-0.95	4.03 (0.88)
17	Australia is a safe place to live.	954	0.4	2.8	12.1	48.1	36.6	-0.89	4.18 (0.78)
18	The standards of dentistry in Australia are very high.	958	1.3	5.2	15.2	60.3	18.0	-0.99	3.89 (0.80)
19	Professional life in Australia is enjoyable.	958	0.3	3.1	14.3	65.1	17.1	-0.77	3.96 (0.68)
20	Working in private practice is enjoyable.	954	0.2	2.4	16.5	59.9	21.1	-0.56	3.99 (0.70)
21	There are good professional development opportunities in Australia.	956	0.9	4.3	9.4	56.3	29.1	-1.11	4.08 (0.80)
22	I find myself very comfortable in the place I am staying right now in Australia.	953	1.0	2.4	12.0	50.3	34.3	-1.05	4.14 (0.80)
23	I love Australia very much.	950	0.9	1.8	13.2	41.1	43.1	-1.08	4.23 (0.82)
LSE3	**Settlement concerns**								
24	The ADC exam process is very long.	896	2.7	6.4	47.1	28.0	15.8	-0.09	3.48 (0.93)
25	Support structures to prepare for the exam are very important.	896	0.7	1.6	30.4	41.1	26.3	-0.28	3.91 (0.83)
26	It takes lot of hard work to start a private practice in Australia.	956	1.2	6.1	18.3	45.9	28.6	-0.77	3.95 (0.90)
27	Specialist registration requirements in Australia are difficult.	937	2.8	8.0	50.4	23.5	15.4	0.03	3.41 (0.94)
28	In future, I would like to see myself a bit higher in professional status.	949	3.3	12.2	35.1	30.2	19.2	-0.25	3.50 (1.04)
29	I want my children to understand the culture of my home country.	944	1.0	3.5	19.5	46.8	29.2	-0.73	4.00 (0.85)
30	I am planning to spend more time with my family in the future.	950	0.3	3.6	21.7	52.1	22.3	-0.49	3.93 (0.78)
LSE4	**Society and culture**								
31	I had a very active social life in my home country	972	0.8	3.8	15.5	39.9	39.9	-0.92	4.14 (0.87)
32	I come from a tight-knit family.	969	2.9	10.7	17.5	36.7	32.1	-0.76	3.84 (1.08)
33	I loved the lifestyle back in my home country.	970	3.2	11.3	23.1	38.7	23.7	-0.58	3.68 (1.05)
* 34	I did not have enough time for social activities in my home country.	969	32.5	37.4	19.2	8.8	2.2	0.76	2.11 (1.03)
LSE5	**Career development** **								
35	I felt I had good hand skills, so I opted for dentistry.	960	3.6	13.9	30.3	36.0	16.1	-0.36	3.47 (1.03)
36	I was very happy with my professional career in my home country.	961	4.1	14.0	24.9	37.0	20.0	-0.47	3.55 (1.08)
37	I had very good mentors in my home country.	964	2.3	8.1	19.0	41.8	28.8	-0.78	3.87 (1.00)
38	I had adequate professional development opportunities in my home country.	965	2.9	8.0	16.7	40.4	32.0	-0.89	3.91 (1.03)

Note: Skew, skewedness; *Negatively worded items; **LSE6 scale was renamed as LSE5; This table presents extracted distributions of the 38 life-story experience (LSE) items. This was extracted from the scale development process that included a preliminary list of 82 items. Shaded areas represent home country based scales on experiences that contribute to dentist migrating to Australia; unshaded areas represent scales based on settlement experiences in Australia.

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