

Elkin – Mass-Market Survey Contingency Tables

Overview

This document presents statistical analyses from the mass-market housing satisfaction survey commissioned by Associate Professor Elkin, School of Design, The Hong Kong Polytechnic University. These are initial analyses for demonstration purposes only. The original dataset is published along with these analyses to support verification of the findings presented.

Overall Satisfaction Mean Ratings

Overall Satisfaction Mean by Market

	HK Market	NYC Market	LDN Market	SEL Market	All Markets
Mean Housing Satisfaction Rating (Std. dev., Normalized Std. dev.)	7.24 (2.33, 0.21)	8.12 (2.75, 0.25)	7.81 (2.64, 0.24)	7.31 (2.26, 0.21)	7.63 (2.53, 0.23)
Sample Size	1,967	2,005	1,930	1,965	7,864 ¹

¹ Respondents that gave ‘Other’ as their market location are omitted from sub-sample totals, meaning the ‘All Market’ total is higher than the sum of the other market totals.

Overall Satisfaction Higher than the Mean Frequency by Market

	HK Market	NYC Market	LDN Market	SEL Market	All Markets
F. Satisfaction Level higher than the Sample Mean (>7.63, i.e., 8 or higher)	997 (50.69%)	1305 (65.09%)	1195 (61.92%)	982 (50.05%)	4503 (57.26%)
F. Satisfaction Level lower than the Sample Mean (<7.63, i.e., >8)	724 (36.80%)	561 (27.98%)	539 (27.93%)	723 (36.85%)	2553 (32.46%)

Association Measures:

Cramer's V = .117798. There is a weak association between respondents' location and their tendency to report housing satisfaction higher or lower than the full-sample mean.

Overall Satisfaction Higher than the Mean Frequency – HK Market by Age Intervals

Priority Ratings

Direct report priority ratings by market by question

	HK Market	NYC Market	LDN Market	SEL Market	All Markets
Mean Financial Support Importance Rating (Std. dev., Normalized Std. dev.)	5.22 (1.15, 0.16)	5.36 (1.54, 0.22)	5.30 (1.43, 0.20)	5.35 (1.12, 0.16)	5.31 (1.32, 0.19)

Mean Employment Access Importance Rating (As above)	5.12 (1.19, 0.17)	5.25 (1.61, 0.23)	5.23 (1.50, 0.21)	5.41 (1.11, 0.16)	5.26 (1.37, 0.20)
Mean Social Access Importance Rating (As above)	4.97 (1.19, 0.17)	5.19 (1.53, 0.22)	5.23 (1.45, 0.21)	5.11 (1.20, 0.17)	5.13 (1.35, 0.19)
Mean housing Autonomy Importance Rating (As above)	5.33 (1.17, 0.16)	5.75 (1.30, 0.19)	5.76 (1.23, 0.19)	5.36 (1.15, 0.16)	5.55 (1.21, 0.17)
Mean Physical Conditions Importance Rating (As above)	5.39 (1.04, 0.15)	5.86 (1.24, 0.18)	5.87 (1.13, 0.16)	5.45 (1.06, 0.15)	5.64 (1.14, 0.16)
Mean Community Identification Importance Rating (As above)	4.89 (1.22, 0.17)	5.15 (1.48, 0.21)	5.03 (1.42, 0.20)	4.76 (1.26, 0.18)	4.96 (1.36, 0.19)

Direct report priority ratings by market ranked

Dimension Mean Self-Report Priority Rate Ranking	1 st	2 nd	3 rd	4 th	5 th	6 th
HK Market	Physical Conditions (5.39)	Autonomy (5.33)	Financial Support (5.22)	Employment Access (5.12)	Social Access (4.97)	Community Identification (4.89)

NYC Market	Physical Conditions (5.86)	Autonomy (5.75)	Financial Support (5.36)	Employment Access (5.25)	Social Access (5.19)	Community Identification (5.15)
LDN Market	Physical Conditions (5.87)	Autonomy (5.76)	Financial Support (5.3)	Employment and Social Access (5.23)		Community Identification (5.03)
SEL Market	Physical Conditions (5.45)	Employment Access (5.41)	Autonomy (5.36)	Financial Support (5.35)	Social Access (5.11)	Community Identification (4.96)
All Markets	Physical Conditions (5.64)	Autonomy (5.55)	Financial Support (5.31)	Employment Access (5.26)	Social Access (5.13)	Community Identification (4.96)

Direct report priority ratings by market frequency above the full sample mean

	HK Market	NYC Market	LDN Market	SEL Market	All Markets*
Financial Support (>5.31)	819 (41.64%)	1075 (53.62%)	962 (49.84%)	941 (47.96%)	3816 (48.52%)
Employment Access (>5.26)	773 (39.30%)	1016 (50.67%)	915 (47.41%)	965 (49.18%)	3693 (46.96%)
Social Access (>5.13)	660 (33.55%)	945 (47.13%)	937 (48.55%)	764 (38.93%)	3328 (42.32%)
Housing Autonomy (>5.55)	896(45.56%)	1259 (62.79%)	1221 (63.26%)	908 (46.28%)	4306 (54.75%)
Physical Conditions (>5.64)	921 (46.82%)	1347 (67.18%)	1295 (67.10%)	1002 (51.07%)	4588 (58.34%)

Community Identification (>4.96)	1237 (62.89%)	1299 (64.79%)	1265 (65.54%)	1184 (60.35%)	5014 (63.76%)
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Association Measures:

Cramer's V = .123233. There is a weak association between respondents' location and their tendency to rate decision-making priorities in **bold** above the full-sample mean.

Ranked Order Priority Dimension Frequency by Market – Top

	HK Market	NYC Market	LDN Market	SEL Market	All Markets*
Financial Dimension #1	1295 (65.83%)	1260 (62.84%)	1231 (63.78%)	1398 (71.25%)	5209 (66.24%)
Employment Access #1	225 (22.8%)	352 (17.56%)	295 (15.28%)	200 (10.19%)	1075 (13.67%)
Social Access #1	104 (5.29%)	111 (5.54%)	127 (6.58%)	155 (7.90%)	498 (6.33%)
Autonomy Dimension #1	162 (8.23%)	70 (3.49%)	88 (4.56%)	103 (5.25%)	424 (5.40%)
Physical Conditions #1	154 (7.83%)	184 (9.18%)	167 (8.65%)	86 (4.38%)	593 (7.54%)
Community Identification #1	27 (1.37%)	28 (1.40%)	22 (1.14%)	20 (1.02%)	97 (1.23%)

Measures of Association:

Cramer's V = 0.08231. There is a negligible association between respondents' location and their tendency to report housing decision-making priority dimensions in **bold** as being their top ranked-choice priorities.

Ranked Order Priority Dimension Frequency by Market – Top and Top 3

	HK Market	NYC Market	LDN Market	SEL Market	All Markets*
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Financial Dimension #1	1295 (65.83%)	1260 (62.84%)	1231 (63.78%)	1398 (71.25%)	5209 (66.24%)
Financial Dimension Top 3	1787 (90.85%)	1863 (92.92%)	1756 (90.98%)	1821 (92.81%)	7258 (92.29%)
Employment Access #1	225 (22.8%)	352 (17.56%)	295 (15.28%)	200 (10.19%)	1075 (13.67%)
Employment Access Top 3	1375 (69.90%)	1344 (67.03%)	1279 (66.27%)	1384 (70.54%)	5382 (68.44%)
Social Access #1	104 (5.29%)	111 (5.54%)	127 (6.58%)	155 (7.90%)	498 (6.33%)
Social Access Top 3	712 (36.20%)	1066 (53.17%)	1073 (55.60%)	1279 (65.18%)	4147 (52.73%)
Autonomy Dimension #1	162 (8.23%)	70 (3.49%)	88 (4.56%)	103 (5.25%)	424 (5.40%)
Autonomy Dimension Top 3	934 (47.48%)	603 (30.07%)	582 (30.16%)	655 (33.38%)	2789 (35.47%)
Physical Conditions #1	154 (7.83%)	184 (9.18%)	167 (8.65%)	86 (4.38%)	593 (7.54%)
Physical Conditions Top 3	901 (45.80%)	926 (46.18%)	894 (46.32%)	615 (31.35%)	3346 (42.55%)
Community Identification #1	27 (1.37%)	28 (1.40%)	22 (1.14%)	20 (1.02%)	97 (1.23%)
Community Identification Top 3	192 (9.76%)	213 (10.62%)	206 (10.67%)	132 (6.72%)	743 (9.45%)

Sub-Dimension Satisfaction Ratings

Mean Sub-Dimension Satisfaction Ratings by Market

HK Market	NYC Market	LDN Market	SEL Market	All Markets*
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Financial Satisfaction - Income	4.76 (1.35, 0.19)	4.97 (1.73, 0.25)	4.76 (4.76, 0.24)	4.54 (1.41, 0.22)	4.76 (1.55, 0.22)
Financial Satisfaction - Costs	4.72 (1.35, 0.19)	4.97 (1.75, 0.25)	4.79 (1.63, 0.23)	4.52 (1.38, 0.20)	4.76 (1.55, 0.22)
Employment Access Satisfaction	4.96 (1.23, 0.18)	5.20 (1.52, 0.22)	5.31 (1.37, 0.20)	5.08 (1.25, 0.18)	5.14 (1.36, 0.19)
Social Access Satisfaction	4.94 (1.18, 0.17)	5.41 (1.48, 0.21)	5.39 (1.35, 0.19)	5.16 (1.21, 0.17)	5.23 (1.33, 0.19)
Autonomy Satisfaction	5.08 (1.21, 0.17)	5.40 (1.59, 0.23)	5.30 (1.55, 0.22)	5.17 (1.20, 0.17)	5.24 (1.40, 0.20)
Physical Conditions Satisfaction – Liveable Area	4.94 (1.28, 0.18)	5.45 (1.55, 0.22)	5.29 (1.48, 0.21)	4.90 (1.31, 0.19)	5.15 (1.42, 0.20)
Physical Conditions Satisfaction – Construction Quality	4.86 (1.24, 0.18)	5.35 (1.51, 0.22)	5.19 (1.51, 0.22)	4.71 (1.33, 0.19)	5.03 (1.42, 0.21)
Physical Conditions Satisfaction – Equipment and Amenities	4.87 (1.23, 0.18)	5.28 (1.56, 0.22)	5.24 (1.42, 0.20)	4.77 (1.28, 0.18)	5.05 (1.39, 0.20)
Community Identification Strength	4.82 (1.24, 0.18)	5.03 (1.61, 0.23)	4.85 (1.57, 0.22)	4.50 (1.47, 0.21)	4.80 (1.49, 0.21)

Mean Sub-Dimension Satisfaction Ratings Ranked in Each Market

Sub-Dimension Mean Satisfaction Rate Rank	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th
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HK Market	Autonomy (5.08)	Employment (4.96)	Social, Physical - Liveable area (4.94)		Physical – Equipment and Amenities (4.87)	Physical – Construction Quality (4.86)	Community ID (4.82)	Financial – Income (4.76)	Financial – Costs (4.72)
NYC Market	Physical – Liveable Area (5.45)	Social (5.41)	Autonomy (5.40)	Physical – Construction Quality (5.35)	Physical – Equipment and Amenities (5.28)	Employment (5.20)	Community ID (5.03)	Financial – Income, Financial – Costs (4.97)	
LDN Market	Social (5.39)	Employment (5.31)	Autonomy (5.30)	Physical – Liveable Area (5.29)	Physical – Equipment and Amenities (5.24)	Physical – Construction Quality (5.19)	Community ID (4.85)	Financial – Costs (4.79)	Financial – Income (4.76)
SEL Market	Autonomy (5.17)	Social (5.16)	Employment (5.08)	Physical – Liveable Area (4.90)	Physical – Equipment and Amenities (4.77)	Physical – Construction Quality (4.71)	Financial – Income (4.54)	Financial – Costs (4.52)	Community ID (4.50)
All Markets	Autonomy (5.24)	Social (5.23)	Physical – Liveable Area (5.15)	Employment (5.14)	Physical – Equipment and Amenities (5.05)	Physical – Construction Quality (5.03)	Community ID (4.80)	Financial – Income, Financial – Costs (4.76)	

Satisfaction Sub-Dimension Higher than Full-Sample Mean Frequency by Market

	HK Market	NYC Market	LDN Market	SEL Market	All Markets*
Financial Satisfaction – Income (>4)	1201 (61.05%)	1255 (62.59%)	1171 (60.67%)	1038 (52.91%)	4688 (59.61%)

Financial Satisfaction – Costs (>4)	1138 (57.85%)	1232 (61.45%)	1156 (59.90%)	960 (48.93%)	4512 (57.38%)
Employment Access Satisfaction (>5)	662 (33.66%)	934 (46.58%)	956 (49.53%)	789 (40.21%)	3361 (42.74%)
Social Access Satisfaction (>5)	654 (33.25%)	1075 (53.62%)	1005 (52.07%)	831 (42.35%)	3582 (45.55%)
Autonomy Satisfaction (>5)	768 (39.04%)	1106 (55.16%)	1022 (52.95%)	842 (42.92%)	3762 (47.84%)
Physical Conditions Satisfaction – Liveable Area (>5)	667 (33.90%)	1123 (56.01%)	976 (50.57%)	691 (35.22%)	3479 (44.24%)
Physical Conditions Satisfaction – Construction Quality (>5)	625 (31.77%)	1047 (52.22%)	938 (48.60%)	564 (28.75%)	3193 (44.24%)
Physical Conditions Satisfaction – Equipment and Amenities (>5)	597 (30.35%)	1037 (51.72%)	942 (48.81%)	579 (29.51%)	3176 (40.39%)
Community Identification Strength (>4)	1185 (60.24%)	1233 (61.50%)	1146 (59.38%)	1017 (51.83%)	4610 (58.62%)

Measures of Association:

Cramer's V = 0.195442. There is a weak association between respondents' location and their tendency to report housing satisfaction sub-dimensions above the full-sample mean.

Sub-Dimension Satisfaction Association with Overall Satisfaction by Market

Measure of Association: Gamma

Association between Sub-Dimension Satisfaction and Overall Satisfaction	HK Market	NYC Market	LDN Market	SEL Market	All Markets
Financial – Income	0.656	0.509	0.505	0.546	0.547
Financial – Cost	0.599	0.507	0.483	0.440	0.507
Employment	0.526	0.499	0.385	0.413	0.440
Social	0.579	0.504	0.458	0.435	0.497
Autonomy	0.637	0.596	0.595	0.543	0.595
Physical – Area	0.669	0.623	0.591	0.617	0.628
Physical – Construction	0.628	0.584	0.583	0.581	0.599
Physical – Amenities	0.619	0.579	0.592	0.574	0.596
Community ID	0.462	0.441	0.393	0.381	0.423

Sub-Dimension Satisfaction Association with Overall Satisfaction by Market Ranked

Measure of Association: Gamma

	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th
HK	Physical – Area (0.669)	Financial – Income (0.656)	Autonomy (0.637)	Physical – Construction (0.628)	Physical – Amenities (0.619)	Financial – Cost (0.599)	Social (0.579)	Employment (0.599)	Community ID (0.462)
NYC	Physical – Area (0.623)	Autonomy (0.596)	Physical – Construction (0.584)	Physical – Amenities (0.579)	Financial – Income (0.509)	Financial – Cost (0.507)	Social (0.504)	Employment (0.499)	Community ID (0.441)
LDN	Autonomy (0.595)	Physical – Amenities (0.592)	Physical – Area (0.591)	Physical – Construction (0.583)	Financial – Income (0.505)	Financial – Income (0.483)	Social (0.458)	Community ID (0.393)	Employment (0.385)

SEL	Physical – Area (0.617)	Physical – Construction (0.581)	Physical – Amenities (0.574)	Financial – Income (0.546)	Autonomy (0.543)	Financial - Cost (0.440)	Social (0.435)	Employment (0.413)	Community ID (0.381)
All Markets	Physical – Area (0.628)	Physical – Construction (0.599)	Physical – Amenities (0.596)	Autonomy (0.595)	Financial – Income (0.547)	Financial – Cost (0.507)	Social (0.497)	Employment (0.440)	Community ID (0.423)

Sub-Dimension Condition Indices

Mean Sub-Dimension Condition Indices by Market

	HK Market	NYC Market	LDN Market	SEL Market	All Markets*
Financial Condition Index Mean	15.71 (3.22)	12.89 (3.26)	12.86 (2.67)	14.03 (2.32)	13.88 (3.12)
Employment Access Condition Index Mean	8.21 (1.74)	8.35 (1.81)	8.37 (1.76)	7.96 (1.61)	8.22 (1.74)
Social Access Condition Index Mean	9.57 (2.23)	8.35 (1.81)	10.35 (2.41)	8.93 (2.25)	9.85 (2.47)
Housing Autonomy Index Mean	10.17 (3.30)	11.43 (4.40)	11.34 (4.47)	11.17 (4.56)	11.03 (4.24)
Physical Housing Conditions Index Mean	18.05 (3.30)	21.83 (7.77)	22.99 (7.08)	22.11 (7.03)	21.24 (7.36)
Community ID Index Mean	19.09 (3.00)	19.49 (4.13)	18.91 (3.72)	17.96 (3.16)	18.87 (3.57)

Markets Ranked by Mean Sub-Dimension Condition Indices

	1 st	2 nd	3 rd	4 th
Financial Condition Index Mean	HK (15.71)	SEL (14.03)	NYC (12.89)	LDN (2.67)
Employment Access Condition Index Mean	LDN (8.37)	NYC (8.35)	HK (8.21)	SEL (7.96)
Social Access Condition Index Mean	LDN (10.35)	HK (9.57)	SEL (8.93)	NYC (8.35)
Housing Autonomy Index Mean	NYC (11.43)	LDN (11.34)	SEL (11.17)	HK (10.17)
Physical Housing Conditions Index Mean	LDN (22.99)	SEL (22.11)	NYC (21.83)	HK (18.05)
Community ID Index Mean	NYC (19.49)	HK (19.09)	LDN (18.91)	SEL (17.96)

Sue-Dimension Condition Indices Higher than Full-Sample Mean Frequency by Market

	HK Market	NYC Market	LDN Market	SEL Market	All Markets*
Financial Condition Index (>13.88)	1499 (76.21%)	828 (41.30%)	663 (34.35%)	1174 (59.84%)	4196 (53.36%)
Employment Access Condition Index (>8.22)	810 (41.18%)	1045 (52.12%)	987 (51.14%)	736 (37.51%)	3589 (45.64%)
Social Access Condition Index (>9.85)	927 (47.13%)	1279 (63.79%)	1224 (63.42%)	670 (34.15%)	4126 (52.47%)
Housing Autonomy Index (>11.03)	566 (28.77%)	809 (40.35%)	701 (36.32%)	727 (37.05%)	2814 (35.78%)
Physical Housing Conditions Index (>21.24)	483 (24.56%)	984 (49.08%)	1077 (55.80%)	1016 (51.78%)	3572 (45.42%)

Community ID Index (>18.87)	639 (32.49%)	1178 (58.75%)	1055 (54.66%)	858 (43.73%)	4225 (53.73%)
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Measures of Association:

Cramer's V = 0.225493. There is a weak association between respondents' location and their tendency to report housing condition indices higher than the full-sample mean in the markets in bold above.

Sub-Dimension Condition Indices Association with Overall Satisfaction by Market

Measure of Association: Gamma

Association between Sub-Dimension Condition Index and Overall Satisfaction	HK Market	NYC Market	LDN Market	SEL Market	All Markets
Financial Condition Index	0.055	0.169	0.168	0.195	0.077
Employment Access Condition Index	0.115	0.128	0.135	0.096	0.132
Social Access Condition Index	0.28	0.188	0.17	0.239	0.245
Housing Autonomy Index	0.213	0.25	0.248	0.156	0.224
Physical Housing Conditions Index	0.216	0.139	0.211	0.193	0.196
Community ID Index	0.417*	0.417*	0.382*	0.381*	0.406*

*The Community Identification Condition Index is the only one to contain a sub-dimension satisfaction rating item. For this reason its association with Overall Housing Satisfaction may be artificially higher.

Sub-Dimension Conditions Indices Association with Overall Satisfaction by Market Ranked

Measure of Association: Gamma

	1 st	2 nd	3 rd	4 th	5 th	6 th
HK	Community ID (0.417)	Social Access (0.28)	Physical Housing Conditions (0.216)	Housing Autonomy (0.216)	Employment Conditions (0.115)	Financial Conditions (0.055)
NYC	Community ID (0.417)	Housing Autonomy (0.25)	Social Access (0.188)	Financial Conditions (0.169)	Physical Housing Conditions (0.139)	Employment Access (0.128)
LDN	Community ID (0.382)	Housing Autonomy (0.248)	Physical Housing Conditions (0.211)	Social Access (0.17)	Financial Conditions (0.168)	Employment Access (0.135)
SEL	Community ID (0.381)	Social Access (0.239)	Financial Conditions (0.195)	Physical Housing Conditions (0.193)	Housing Autonomy (0.156)	Employment Access (0.096)
All Markets	Community ID (0.406)	Social Access (0.245)	Housing Autonomy (0.224)	Physical Housing Conditions (0.196)	Employment Access (0.132)	Financial Conditions (0.077)