

Tables

Table 1

Background Characteristics of Respondents and Propensity to Share (PtS)

Characteristics	Frequency (N)	Percent	Number of shared items	PtS (Shared items/N)
Age (Mean: 52.53 Years)				
Less than 30 years	12	5.33	76	6.33
30 – 40 years	38	16.89	218	5.74
41 – 50 years	45	20	273	6.07
51 – 64 years	83	36.89	474	5.71
65 years and older	47	20.89	268	5.70
Total	225	100		
Gender				
Male	97	42.36	548	5.65
Female	132	57.64	784	5.94
Total	229	100		
Ethnicity				
African American	18	7.73	105	5.83
Asian	32	13.73	155	4.84
Caucasian	45	19.31	271	6.02
Hispanic/Latino	68	29.18	386	5.68
Hawaiian and Pacific Islander	57	24.46	357	6.26
Other	13	5.58	80	6.15
Total	233	100		
Occupation				
Government	76	33.48	437	5.75
Education	50	22.03	308	6.16
Retired/Not in job market	29	12.78	166	5.72
Nonprofit	23	10.13	135	5.87
Fire and law enforcement	12	5.29	66	5.50
Self-employed	12	5.29	72	6.00
Disaster response and EM	7	3.08	53	7.57
Medical/Healthcare	9	3.96	33	3.67
Construction and Transportation	5	2.20	44	8.80
Other	4	1.76	35	8.75
Total	227	100		
Island				
American Samoa	43	15.09	269	6.26
CNMI and Guam	34	11.93	205	6.03
Hawaii	81	28.42	431	5.32
Puerto Rico	88	30.88	462	5.25
U.S. Virgin Islands	39	13.68	213	5.46
Total	285	100		

Table 2*Sharing of Goods and Services During Disasters*

Goods and services	Shared during disaster (Multiple choice)		Most important to share		Most difficult to share	
	N	%	N	%	N	%
Water	224	78.60	79	29.04	30	11.24
Food	248	87.02	67	24.63	8	3.00
Clothing	146	51.23	3	1.10	3	1.12
Shelter/housing	184	64.56	43	15.81	61	22.85
Equipment	156	54.74	8	2.94	13	4.87
Vehicles	97	34.04	1	0.37	14	5.24
Services	172	60.35	18	6.62	29	10.86
Money	116	40.70	10	3.68	60	22.47
Information	165	57.89	32	11.76	25	9.36
Other (e.g. medication, energy, household goods, personal hygiene supplies, masks, and PPE)	51	17.89	11	4.04	24	8.99
Total			272	100	267	100

Table 3*Barriers to Sharing During Disasters*

Barriers (Multiple choice)	Number	Percent
Inadequate supply	140	49.12
Problem with delivery resources	129	45.26
Unwillingness to share resources	31	10.88
Poor communications and coordination	131	45.96
Health and safety requirements or concerns	100	35.09
Concern over liabilities and legal matters	51	17.89
Ethnic or religious differences	18	6.32
Other (e.g. existing institutional set up, mismatch between demand and supply, no power source, and hoarding behaviors)	43	15.09

Table 4*Strategies for Overcoming Barriers to Sharing*

Strategies (Multiple choice)	Number	Percent
Training and education	161	56.49
Improving social relations	128	44.91
Accounting and recording of sharing behaviors	68	23.86
Developing mechanisms for payback and reciprocity	66	23.16
Other (e.g. communication and coordination, pre-disaster planning, stockpiling, better distribution systems, community outreach, and recruiting and mobilizing volunteers)	83	29.12

Table 5*Ranking of Strategies to Overcome Barriers*

Ranking	Create an electronic bulletin board for matching people who need goods and services with those who have goods and services to share.		Use or modify existing platforms and systems for sharing (e.g., Uber, Lyft, Airbnb, etc.) to share goods and services during disasters.		Have government agencies establish platforms that are activated during disasters to share goods and services.		Encourage nonprofits, faith-based and nongovernmental organizations (NGOs) to develop and manage systems for sharing more widely during disasters.	
	N	%	N	%	N	%	N	%
Best Strategy	40	16.19	30	12.24	125	49.80	113	45.20
Good strategy	127	51.42	114	46.53	86	34.26	121	48.40
Neither good nor bad strategy	48	19.43	76	31.02	24	9.56	16	6.40
Bad strategy	25	10.12	17	6.94	9	3.59	0	0.00
Worst strategy	7	2.83	8	3.27	7	2.79	0	0.00
Total	247	100	245	100	251	100	250	100

Table 6*Disasters With Reported Sharing of Goods and Services*

Serial	Disaster	Frequency	Percent	Year	Location
1	Hurricane Maria	103	35.76	2017	Puerto Rico, U.S. Virgin Islands
2	COVID-19	31	10.76	2020-2021	Puerto Rico, U.S. Virgin Islands, Guam, CNMI, Hawaii, American Samoa
3	Hurricane Irma	23	7.99	2017	Puerto Rico, U.S. Virgin Islands
4	Typhoon Yutu	19	6.6	2018	Guam, CNMI
5	2009 Tsunami	18	6.25	2009	American Samoa
6	Cyclone Gita	14	4.86	2018	American Samoa
7	Hurricane Iniki	11	3.82	1992	Hawaii
8	2020 Earthquake	9	3.13	2020	Puerto Rico
9	2018 Kilauea Eruption	7	2.43	2018	Hawaii
10	2018 Kauai Flood	5	1.74	2018	Hawaii
11	2021 Haleiwa Flood	5	1.74	2021	Hawaii
12	Hurricane Hugo	4	1.39	1989	Puerto Rico, U.S. Virgin Islands
13	Typhoon Soudelor	4	1.39	2015	CNMI
14	Cyclone Heta	3	1.04	2004	American Samoa
15	Cyclone Val	3	1.04	1991	American Samoa
16	2021 Hauula Flood	2	0.69	2021	Hawaii
17	Hurricane Iwa	2	0.69	1982	Hawaii
18	Hurricane Laura	2	0.69	2020	Hawaii
19	Typhoon Pongsona	2	0.69	2002	Guam
20	1994 Northridge Earthquake	1	0.35	1994	Hawaii
21	2008 Kauai Dam Brach	1	0.35	2008	Hawaii
22	2010 Chile Earthquake and Tsunami	1	0.35	2010	Hawaii
23	2011 Manoa Flood	1	0.35	2011	Hawaii
24	2018 Oahu Flood	1	0.35	2018	Hawaii
25	2021 Tsunami warning	1	0.35	2021	American Samoa
26	911 Terrorist Attack	1	0.35	2001	Hawaii
27	Hurricane Andrew	1	0.35	1992	U.S. Virgin Islands
28	Hurricane Donna	1	0.35	1960	Hawaii
29	Hurricane Dorian	1	0.35	2019	U.S. Virgin Islands
30	Hurricane Harvey	1	0.35	2017	Hawaii
31	Hurricane Irene	1	0.35	2011	Hawaii
32	Hurricane Marilyn	1	0.35	1995	U.S. Virgin Islands
33	Hurricane Sandy	1	0.35	2012	Hawaii
34	KyoungJu-Pohang Earthquake	1	0.35	2017	Hawaii
35	Ramstein Air Show Disaster	1	0.35	1988	Guam
36	Texas Winter Storm	1	0.35	2021	Hawaii
37	Typhoon Jean	1	0.35	2018	CNMI
38	Typhoon Omar	1	0.35	1992	Guam
39	Typhoon Paka	1	0.35	1998	Guam
40	Typhoon Wutip	1	0.35	2019	Guam

Table 7*Regression Analysis of the Propensity to Share (PtS) and Demographic Characteristics*

Analysis of Variance					
Source	DF	Sum of squares	Mean square	F value	Pr > F
Model	8	133.57445	16.69681	3.16	0.0022
Error	186	981.47170	5.27673		
Corrected Total	194	1115.04615			

Root MSE	2.29711	R-Square	0.1198
Dependent Mean	5.72308	Adj R-Sq	0.0819
Coeff Var	40.13773		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	7.03962	1.03847	6.78	<.0001
Age	1	-0.00834	0.01537	-0.54	0.5879
Age: Less than 30 years	1	-0.18357	0.82853	-0.22	0.8249
Female	1	0.42630	0.35549	1.20	0.2320
Samoa	1	0.40818	0.51512	0.79	0.4291
Hurricane Maria vs. Other Disasters	1	-0.80386	0.39673	-2.03	0.0442
COVID-19 and Other Disasters	1	-2.15297	0.54937	-3.92	0.0001
White-collar and blue-collar occupations	1	-0.22491	0.37753	-0.60	0.5521
Ethnicity	1	-0.19439	0.16671	-1.17	0.2451

Note: Bold values are significant at the 0.05 confidence interval.

DF=Degree of Freedom, MSE = Mean Squared Error, Adj R-Sq = Adjusted R-Square, Coeff Var =Coefficient Variance, Pr = Probability

Table 8*Chi-square Analysis of Home/Shelter Sharers and Home/Shelter Nonsharers During Disasters*

Variables	Home/shelter sharers		Home/shelter non-sharers		chi-square	p-value
	N	%	N	%		
Age					2.5482	0.636
Less than 30 years	10	83.33	2	16.67		
30 to 40 years	23	60.53	15	39.47		
41 to 50 years	32	71.11	13	28.89		
51 to 64 years	55	66.27	28	33.73		
65 years and older	32	68.09	15	31.91		
Gender					0.2636	0.6076
Male	63	64.95	34	35.05		
Female	90	68.18	42	31.82		
Geographic area					14.783	0.0001
Samoa	39	90.70	4	9.30		
Others	146	60.33	96	39.67		
Job types					0.1873	0.6652
White collar	46	69.7	92	66.67		
Blue collar	20	30.3	46	33.33		
Disasters: Hurricane Maria and others					0.2837	0.5943
Hurricane Maria	59	62.77	35	37.23		
Others	126	65.97	65	34.03		
Disasters: COVID-19 and others					27.1033	<.0001
COVID-19	8	24.24	25	75.76		
Others	177	70.24	75	29.76		
Region					1.8445	0.1744
Pacific	108	68.35	50	31.65		
Caribbean	77	60.63	50	39.37		

Note: Bold values are significant at the 0.05 confidence interval
p-value = probability value

Table 9*Logit Model of Home/Shelter Sharers vs Home/Shelter Nonsharers Characteristics*

Parameter	DF	Estimate	Standard error	Wald chi-square	Odds ratio	Pr > chi-sq.
Intercept	1	2.2053	1.6079	1.8812		0.1702
Less than 30 years	1	0.56	1.1636	0.2316	1.751	0.6303
Age 30 to 40 years	1	0.7764	0.8089	0.9213	2.174	0.3371
Age 41 to 50 years	1	0.5412	0.7784	0.4833	1.718	0.4869
Age 51 to 64 years	1	0.259	0.7319	0.1253	1.296	0.7234
Age 65 years and older	1	0.5967	0.8243	0.5241	1.816	0.4691
Male	1	-1.3696	1.2334	1.233	0.254	0.2668
Hurricanes	1	0.3586	0.4661	0.592	1.431	0.4416
Hurricane Maria	1	-0.4204	0.7589	0.3068	0.657	0.5796
COVID-19	1	-1.7039	0.6107	7.7835	0.182	0.0053
Government job	1	-0.6524	0.4139	2.4847	0.521	0.115
White collar job	1	-0.4295	0.4229	1.0318	0.651	0.3097
Puerto Rico	1	-0.152	0.97	0.0246	0.859	0.8754
American Samoa	1	3.49	1.4429	5.8507	32.787	0.0156
U.S. Virgin Island	1	0.8295	0.9417	0.7758	2.292	0.3784
CNMI and Guam	1	1.6488	1.1718	1.9798	5.201	0.1594
Asian	1	-0.6417	0.8452	0.5765	0.526	0.4477
Caucasian	1	0.0822	0.8267	0.0099	1.086	0.9208
Hispanic	1	-0.1287	1.0196	0.0159	0.879	0.8996
Pacific Islander (except Hawaiian)	1	-0.9923	1.3815	0.5159	0.371	0.4726

Note: Bold values are significant at the 0.05 confidence interval

Table 10*Twenty Most Frequently Used Words (American Samoa and Other Islands)*

American Samoa			Other Islands		
Word	Count	Similar Words	Word	Count	Similar Words
Samoan	13	samoan, samoans	community	75	communal, communities, community
Culture	12	cultural, culture	culture	68	cultural, culturally, culture, cultures
Family	11	families, family	people	35	people, peoples
Community	8	communal, communities, community	disaster	29	disaster, disasters, disasters'
Disaster	8	disaster, disasters	island	25	island, islander, islanders, islands
Helping	5	helping, helps	practices	24	practice, practiced, practices, practicing
Resources	5	resources	resources	21	resources
Common	4	common	local	19	local, locals
Everyone	4	everyone	neighbors	18	neighbor, neighboring, neighbors
People	4	people	location	17	located, location, locations
Giving	3	giving	needed	16	needed, needs
Goods	3	goods	family	16	families, family, 'family'
Individual	3	individual, individuals	affected	16	affect, affected, affects
Information	3	information	Hawaiian	15	Hawaiian, Hawaiians
Living	3	lives, living	information	14	information, informed
Others	3	others	government	13	government
Services	3	service, services	access	12	access, accesses, accessibility, accessible
Whole	3	whole	everyone	12	everyone
Affair	2	affair, affairs	knowledge	12	knowledge, knowledgeable, knowledges
Anyone	2	anyone	Organize	12	Organize, organized
			Hawaii	11	Hawaii
			Living	11	Living