

Tables

Table 1: Sociodemographic Characteristics of Survey Respondents (N=301)

	n(%)
Age	
21 to 29	40 (13.5%)
30 to 39	57 (18.9%)
40 to 49	73 (24.2%)
50 to 59	72 (23.9%)
60 and above	59 (19.6%)
Gender	
Women (%)	136 (45.2%)
Ethnicity	
Chinese	202 (67.1%)
Malay	46 (15.3%)
Indian	36 (12.0%)
Others	17 (5.6%)
Education	
University and above	124 (41.2%)
Pre-University (International Baccalaureate/Cambridge GCE "A" Levels/Diploma)	83 (27.6%)
Secondary / Vocational Training or Education	88 (29.2%)
Primary or No Formal Education	6 (2.0%)
Employment Status	
Employed	228 (75.8%)
Unemployed	41 (13.6%)
Not Applicable	32 (10.6%)
Employed	
Currently employed and working full time	199 (66.1%)
Currently employed and working part time (less than 35 hours a week)	23 (7.6%)
Currently employed but not working (due to partial lockdown)	6 (2.0%)
Unemployed	
Unemployed for more than three months	32 (10.6%)
Unemployed recently in the last three months	9 (3.0%)
Not Applicable	
Retired	17 (5.6%)
Not applicable (Housewife/Homemaker/Currently still schooling)	15 (5.0%)
Current Martial Status	
Single	99 (32.9%)
Married	184 (61.1%)
Divorced / Separated	11 (3.6%)
Widowed	7 (2.3%)
Residential Dwelling	

Smaller public housing / Currently renting a room	44 (14.6%)
Larger public housing	204 (67.8%)
Private Condominiums / Apartments / Landed Property	53 (17.6%)
Number of person(s) staying together in the same household	
Range (Min - Max)	1 - 10
Mean (SD)	4.3 (1.7)
Persons living together in the same household	
Children	148 (49.2%)
Spouse/Partner	184 (61.1%)
Relatives	14 (4.6%)
Siblings	63 (20.9%)
Domestic helper	32 (10.6%)
Average monthly household income per person (Percentile)*	
Below \$1,600 (1st to 30th)	60 (19.9%)
Between \$1,601 to \$3,300 (31st to 60th)	101 (33.6%)
Between \$3,301 to \$6,800 (61st to 90th)	66 (21.9%)
Above \$6,801 (91st and above)	39 (13.0%)
Not comfortable to share	35 (11.6%)

* Monthly household income per household member is calculated by taking the total gross household monthly income divided by the total number of family members living under the household, grouped by percentiles based on estimates from the national household income trends published by the Department of Statistics²⁶.

Table 2: Diabetes Status, Medication, Comorbidities and Health Services Access (N=301)

Type of diabetes		
	Type 2 diabetes	206 (68.4%)
	Type 1 diabetes	79 (26.2%)
	Others (MODY, LADA)[†], Unclear	16 (5.3%)
Diabetes Duration		
	< 5 years	65 (21.6%)
	5 – 9 years	75 (24.9%)
	10 – 14 years	59 (19.6%)
	15 – 20 years	45 (14.9%)
	> 20 years	57 (18.9%)
Diabetes Medication		
	Oral medication	127 (42.2%)
	Insulin injection	81 (26.9%)
	Insulin and oral medication	83 (27.6%)
	I am not sure/Not on medication	10 (3.3%)
Existing Comorbidities (Indicated Yes)		
	High blood pressure/ Hypertension	134 (44.5%)
	High cholesterol	146 (48.5%)
	Heart disease	21 (7.0%)
	Kidney disease	21 (7.0%)
	Foot ulcers/ amputations	8 (2.7%)
	Diabetes eye complications	33 (11.0%)
No. of Comorbidities		
	Mean (SD)	1.2 (1.1)
	0	100 (33.2%)
	1	92 (30.6%)
	2	75 (24.9%)
	3 or more	34 (11.3%)
Diagnosed with mental health condition or disorder before		
	Yes	18 (6.0%)
	Current on treatment for your mental health condition	7 (2.3%)
Usual location for diabetes follow-up care, appointments and treatment		
	GP Clinic	10 (3.3%)
	Polyclinic	27 (9.0%)
	Specialist Outpatient Clinic in Government Hospital	270 (89.7%)
	Private institution	5 (1.7%)
Frequency of visit to doctor for diabetes care before COVID-19 and circuit breaker		
	1 – 2 times/year	67 (22.3%)
	3 – 4 times/year	218 (72.4%)
	5 – 6 times/year	15 (5.0%)
	7 or more times/year	1 (0.3%)

[†]MODY, Maturity-Onset Diabetes of the Young; LADA, Latent Autoimmune Diabetes in Adults

Table 3: Behavioural and Diabetes Management Practices During COVID-19 Period

Frequency of update with news on COVID-19		
Daily	229 (76.1%)	
A few times a week	57 (18.9%)	
Once weekly	12 (4.0%)	
I do not update myself on news on COVID-19 / Other Frequency	3 (1.0%)	
Sources of news updates on the COVID-19 situation		
Local television channels	151 (50.2%)	
Social Media (e.g. Facebook, Twitter, Youtube, WhatsApp)	124 (41.2%)	
Government Official Website (Ministry of Health, Gov.sg)	115 (38.2%)	
Government Social Media Channel (e.g. Gov.sg Telegram, WhatsApp)	103 (34.2%)	
Newspaper	80 (26.6%)	
Websites or online news pages	76 (25.2%)	
Conversations with family members	42 (14.0%)	
Conversations with friends	27 (9.0%)	
Other sources	12 (4.0%)	
I keep in touch with my friends and family whom I do not live together with during the circuit breaker period		
Yes	260 (86.4%)	

Table 4: Descriptive statistics of DHP by treatment group, compared with local literature and averages reported.^{28,29}

	Current Study			Comparison	
	N	Mean (SD)	Range (Min-Max)	Mean (SD)	Reference
Psychological Distress	301	20.6 (20.0)	0.0, 100	21.2 (22.0)	²⁹
<i>I am not sure/Not on medication</i>	10	16.1 (17.5)	0.0, 61.1	12.9 (Diet)	²⁸
<i>Insulin and Oral medications</i>	83	26.8 (24.3)	0.0, 94.4	-	
<i>Insulin injections</i>	81	19.0 (18.7)	0.0, 100	31.0	
<i>Oral medications</i>	127	17.8 (16.9)	0.0, 94.4	21.5	
Disinhibited Eating	301	43.3 (17.2)	0.0, 93.3	42.1(17.5)	²⁹
<i>I am not sure/Not on medication</i>	10	44.0 (14.1)	20.0, 60.0	33.4 (Diet)	²⁸
<i>Insulin and Oral medications</i>	83	48.8 (20.2)	6.7, 93.3	-	
<i>Insulin injections</i>	81	39.6 (14.9)	0.0, 80.0	37.4	
<i>Oral medications</i>	127	42.0 (15.9)	13.3, 93.3	33.4	
Barriers to Activity	301	34.5 (18.1)	0.0, 95.2	27.4 (19.7)	²⁹
<i>I am not sure/Not on medication</i>	10	31.0 (17.9)	4.8, 57.1	13.8 (Diet)	²⁸
<i>Insulin and Oral medications</i>	83	38.6 (21.0)	4.8, 95.2	-	
<i>Insulin injections</i>	81	32.7 (16.8)	0.0, 76.2	30.0	
<i>Oral medications</i>	127	33.2 (16.7)	0.0, 80.0	18.6	

Table 5: Hierarchical linear regression results of full model, comprising sociodemographic, diabetes-related status and medical history with DHP-18 subscales.

	Psychological Distress		Disinhibited Eating		Barriers to Activity	
Predictors (Intercept)	β_{PD}	p	β_{DE}	p	β_{BTA}	p
	25.62	0.006	48.37	<0.001	37.37	<0.001
SOCIODEMOGRAPHIC FACTORS						
Gender						
Female			Reference			
Male	-0.53	0.821	-1.83	0.358	0.05	0.981
Age Group						
21 to 29			Reference			
30 to 39	4.58	0.282	2.71	0.455	4.25	0.289
40 to 49	-3.15	0.445	-7.07	0.045	2.08	0.593
50 to 59	-9.98	0.021	-9.32	0.011	4.50	0.265
60 and above	-9.75	0.034	-3.48	0.373	6.80	0.115
Ethnicity						
Chinese			Reference			
Indian	7.73	0.018	0.10	0.972	2.10	0.492
Malay	-0.08	0.984	5.71	0.083	0.55	0.879
Others	-2.25	0.654	-1.52	0.723	5.28	0.265
Employment Status						
Employed			Reference			
Not applicable	-2.56	0.533	-8.52	0.015	-4.95	0.200
Unemployed	2.53	0.489	-10.33	0.001	-1.99	0.562
Education Level						
Primary or Lower	9.22	0.292	5.64	0.450	-3.52	0.669
Secondary / Vocational	-1.55	0.614	-2.00	0.445	-3.28	0.258
Pre-University			Reference			
University and Above	-1.90	0.537	0.03	0.990	-1.91	0.510
Household Income						
Below \$1,600 (1 st to 30 th)	-7.34	0.091	1.84	0.618	-8.64	0.034
Between \$1,601 to \$3,300 (31 st to 60 th)	-6.19	0.118	-2.83	0.401	-0.93	0.802
Between \$3,301 to \$6,800 (61 st to 90 th)	-8.63	0.037	-4.64	0.188	-4.90	0.207
Above \$6,801 (91 st and above)			Reference			
Not comfortable to share	-7.14	0.136	0.02	0.996	-7.08	0.116
Housing Type						
Smaller public housing / Currently renting a room			Reference			
Larger public housing	-0.45	0.891	0.81	0.772	-1.80	0.561
Condominium / Apartments	-3.34	0.457	0.43	0.911	-4.29	0.310

/ Landed Property							
DIABETES-RELATED STATUS							
Diabetes Type							
Not sure / Unclear, Others (MODY, LADA) [†]	Reference						
Type 1 diabetes	10.35	0.082	-4.95	0.328	0.75	0.893	
Type 2 diabetes	1.66	0.750	-1.21	0.785	-1.71	0.728	
Diabetes Medication							
Not sure/ Not on medication	Reference						
Insulin and Oral medications	3.35	0.628	7.82	0.184	6.58	0.311	
Insulin injections	-6.83	0.338	1.64	0.788	-0.29	0.966	
Oral medications	-1.59	0.807	1.97	0.723	1.29	0.833	
Diabetes Duration							
< 5 years							
5 – 9 years	-2.88	0.395	1.71	0.553	-4.73	0.138	
10 – 14 years	1.06	0.777	0.35	0.912	-1.93	0.584	
15 – 20 years	-1.17	0.775	-5.13	0.142	-8.14	0.035	
> 20 years	-2.47	0.532	-6.90	0.042	-0.18	0.961	
MEDICAL HISTORY							
Previous Diagnosis of Mental Health Conditions	11.44	0.017	4.01	0.326	9.63	0.033	
Number of Comorbidities	3.98	0.001	2.71	0.007	1.78	0.106	
Observations	301		301		301		
Model R ² / R ² adjusted [‡]							
Model 1	0.096 / 0.035		0.112 / 0.052		0.068 / 0.005		
Model 2	0.139 / 0.050		0.185 / 0.101		0.111 / 0.020		
Model 3	0.193 / 0.103		0.211 / 0.123		0.136 / 0.040		

[†] MODY, Maturity-Onset Diabetes of the Young; LADA, Latent Autoimmune Diabetes in Adults

[‡] Variables in Model 1: Sociodemographic Factors; Model 2: Model 1 + Diabetes-related status, Model 3: Model 2 + Medical history