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Stability of Values and Opinions During the COVID-19 Crisis: Panel Study Data from The Maldives

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ABSTRACT *The underlying assumption of the present COVID-19 crisis is that it can profoundly change the public values and opinions during its various phases leading to permanent societal and economic changes. This research is part of a longitudinal study of values in a crisis during the different phases of the COVID-19 pandemic. The same set of respondents from the wave 1 of Values in Crisis (VIC) survey of May 2020 (n=1026) were invited to participate in wave 2 in November 2021, achieving a response rate of 60.0% (n=615). To check the stability of values, Kendall's tau-b coefficient was used to estimate the correlation coefficient to measure the strength of association of selected variables. These include national pride, political orientation, faith, social trust, financial satisfaction, work-life balance, satisfaction with life and social relations, health, trust in institutions, and social cohesion. The main findings indicate that, during the two years of the crisis, values and opinions remained largely stable in the Maldives. The research concludes with reflections drawn and opens avenues for debate for social science practitioners expecting drastic changes in people's values and opinions due to the COVID-19 crisis.*

Keywords: *COVID-19 crisis, public opinion, Maldives, preferences, values*

Evolutionary theorists hypothesise that value adaptations and changed behaviours can be expected with the onset of a large-scale infectious disease in communities (Thornhill & Fincher, 2014). The change may come in the form of observed reduced disease spreading collective behaviour from the public (Woltin & Bardi, 2018). Similarly, the present COVID-19 crisis has had significant impact with collective disease reducing behaviours being observed, such as wearing of masks and maintaining physical distance from one another (Martinelli, 2020). Even with the changed behaviours observed in the Maldives (Moosa et al., 2020), there is still lack of evidence whether the current COVID-19 crisis has the potential to change social values and opinions of people. Hence, more studies are needed to check whether the current pandemic has the potential to change public opinion en masse. In this regard, the present study aims to verify through empirical testing, if values and opinions of people have shifted amidst the two significant periods of the COVID-19 crisis: first, at the onset (i.e., May 2020) i.e., soon after the announcement of the first case of COVID-19 in the Maldives; and next, 1.5 years after the first lock down (i.e., November 2021) with easing of restrictive measures with over 80% vaccine coverage across the country (HPA & MoH, 2021).

Empirical research conducted on values and opinion changes during, for instance, terrorist activity (Hetherington & Nelson, 2003) or natural disasters (Malhotra & Kuo., 2008) and also during the times of economic recession (Reeskens & Vandecasteele, 2017) reports an instant elevated support by the public for the efforts of the government and at the same time, demonstrates negative sentiments towards those who goes against the efforts of the government to return the communities to normalcy. However, evidence also suggests such sentiments are often short-lived and the public values soon reverts to its original sentiment towards the government or related institutions once the source of the instabilities have been removed (Dinesen & Jaeger, 2013). However, the situation in the current COVID-19 crisis is unlike any crises in the recent past. It is being protracted and it is unclear how the values and opinions shape over prolonged periods. With COVID-19, the public was confronted with many challenges and dependency on the government was witnessed from leadership, expert opinions on “disease reducing” advice, medical attention to financial aid with the tremendous economic fallout caused by the quasi-mandatory measures such as social distancing and the travel restrictions (Moosa et al., 2020; Davalgi et al., 2020; Yu & Aviso, 2020).

With the present crisis posing unfamiliar threats and challenges to the Maldives, the COVID-19 also presented a unique opportunity to study the changes of public values as well as opinions during a crisis, and can contribute to scholarly knowledge in the field of values, preferences, and attitude studies (Warren et al., 2011; Steg et al., 2014). In this endeavour, it is important to acknowledge that values are socialised from a very young age and remain relatively stable over time (Co-author et al., 2021). Values taught by parents get strongly anchored in individual belief systems, but it does not mean these values do not change; values such as religiosity hardly changes over time, since it is strongly imprinted in individual belief systems and forms the basis for one’s morality as well as personal identity (Inglehart, 1985). However, values are said to be more unstable because it is expected values tend to change with the changes that occur in any given society (Uslaner, 2002). Being politically left or right is also an identity people regularly express throughout their lives. Whereas, for opinions, individuals mainly react in reference to an object, person, institution, or event that is based on the current situation of that particular society (Ajzen, 2005). Attitudes, preferences, and opinions may be subjected to change depending on the availability of information or due to policy change (Uslaner, 2002). One common example of unstable preference is trust in political persons in power and their performances. The better the performance, the greater the trust however, this preference is not always homogeneous (Mishler & Rose, 2001).

The highest stability is expected in values such as religiosity, political ideology, and social trust; on the other hand, the values considered most unstable and subjected to changes are preferences over political issues as well as institutional trust, as they depend upon government functioning alone (Lühiste, 2006). Studies on values have also shown that a range of social and political variables relevant for the effective functioning of democratic societies have a range of stable values as the basis (Sortheix et al., 2019). According to Daniel et al. (2020), values are highly subjected to change in the context of the current crisis.

Social value orientations (SVO’s) of a society determine people’s behaviours during a crisis. SVOs assessed for the Maldives during the first wave of the

COVID-19 crisis using the Schwartz Personal Values Questionnaire (Schwartz, 1992) indicated that Maldivian society weigh slightly towards prosocial behaviour (Moosa et al., 2021) However, with the results indicating that there is no strong value orientation towards conservation and self-transcendence, and with low level of confidence in the institutions, the country faces the risk of non-compliance to measures and thus may result in the escalation of the crisis situation for the Maldives (Moosa et al., 2021).

Thus, this paper presents findings from the values in crisis survey to empirically verify if values and opinions remained stable amidst the COVID-19 crisis. Accordingly, the findings from the first survey are compared with the survey conducted after a 1.5-year interval

Literature Review

Values are referred to those that individuals consider to be important and worthy of their time and effort (Schwartz, 2018). Values also shape people's behaviour towards activities and experiences that are consistent with one's upheld value systems (Schwartz, 1992). Consequently, values impact the way people behave and the study of people's behaviour becomes crucial especially in these trying times when the world is going through a crisis of the COVID-19 crisis. Values are also likely to change with changes in one's life and community circumstances because the primary function of our value system is to channel our activities to cope with challenges. According to Uslaner (2002), there are two kinds of public opinions: those which are more stable and are relatively enduring referred to as 'core values'; and those less stable opinions that are referred to as mere 'preferences' or 'attitudes' that are subjected to change within days. Core values are formed because of socialisation which begins from a very young age that is imparted through the teachings of our first primary care givers and learned through life circumstances; and these stabilise over time to form part of individual core values systems (Inglehart, 1977).

Literature often quotes the stability of religious values and understandably so, since it forms part of one's core values and thus, becomes part of one's personal identity (Inglehart, 1985). Similarly, literature on religious values, indicating political values and affiliations form part of one's core values and remains fairly stable (Carmines & Stimson, 1980; Converse, 1964).

For this study, the explanation of value opinions is based on Uslaner's (2002) definition of 'preferences' or 'attitudes. Unlike core values, which are ingrained into one's fundamental belief systems from a young age, value opinions are based more on the present state of affairs and current situation of a specific community. Attitudes and preferences are subjected to change especially when people are put in extraordinary situations (Uslaner, 2002). This instability in preference among the people can be witnessed in political trust for instance when a country's government is performing well, people are more politically trusting vice versa, making political trust a very volatile preference.

When the COVID-19 crisis hit across the globe in the beginning of March 2020, many of the governments received high ratings and public support (Moosa et al., 2020). This is usually explained as the "rally" effect (Melanie et al., 2021). All in all, this study, which assesses changes in values and opinions across two-

time frames of the crisis, is expected to find the highest stability among the core values of religiosity, social trust, and political orientations (Carmines & Stimson, 1980). On the other hand, unpredictability can be expected in values relating to trust in government and institutions, with the “rally” effect highly likely among individuals (Uslaner, 2002). Similarly, political trust is an unstable value where people of a society can be subjected to different conditions whereby masses are provided with convincing information or policy changes to convince the masses that the government is doing well and working for the best interest of the masses (Mishler & Rose, 2001). According to Inglehart & Norris (2016), values socialised from a very young age such as religiosity are proposed to be more stable whereas value concerns relating to politicised issues such as gender equality and privacy are considered more unstable and tends to change depending on the external circumstances such as political information presentation (Carmine & Stimson, 1980).

Methods

Sampling procedures

The data is reported from the values in crisis (VIC) survey wave 2, which was collected during (November 2021) the twentieth month since the first community spread of the COVID-19 cases in the Maldives. This data is compared against the findings from VIC survey wave 1 which was collected during (May 2020) the sixth month of the community spread of the virus and the consequent first lockdown observed in the Maldives as well. The VIC survey is designed as a panel study. The data was collected through an online quantitative questionnaire administered to a stratified representative sample from urban and rural clusters of the Maldives. The VIC survey wave 1 recruited n=1026 participants during a period of seven days in May 2020; and the same participants were invited to participate in VIC wave 2, achieving 61.0% (n=615) response rate. The VIC survey target was to recruit participants from the urban versus rural communities to the ratio of 40% and 60% respectively. For the purpose of this study, urban regions are taken as all the islands/atolls that have been assigned city-status by the government of Maldives. This includes Male’, Vilimaale, Hulhumale, Kulhudhuffushi, Fuvahmulah, and Addu Atoll (NBS, 2015). Wave 1 participants were made up of 42% (n=433) urban and 58% (n=593) rural population, while wave 2 participants consisted of 39% urban (n=240) and 61% rural (n=376) participants.

Nonresponse analysis for wave 2 indicates that over the course of time fewer people responded from the two younger age groups and the elderly age groups (Refer to table 1). Some of the elderly participants and many of the younger participants from the initial VIC survey were unresponsive during wave 2, and many declined to follow-up even when contacted several times.

In addition to the urban-rural representation, the sample was also subjected to stratification on gender and age to align to the population distribution of the Maldives.

Table 1
The nonresponse analysis for wave 2 against wave 1

Age	VIC wave 1	VIC wave 2	Retention %
18-24	194	82	42.27
25-34	354	200	56.50
35-44	234	175	74.79
45-54	125	95	76.00
55-64	68	43	63.24
95+	51	21	41.18
	1026	615	60.04

Measuring values and preferences

To measure the stability of values, thirteen items were chosen for comparison across both wave 1 and wave 2 of the Values in Crisis Survey in the Maldives. Converse's (1964) definition of values was used in determining the grouping of these values. In line with literature, importance given to religion, social trust, national pride and left-right political orientation is expected to be the most stable. The lesser stable values were theorised to be satisfaction related opinions which requires an emotional response such as satisfaction with finances, with work-life balance, with life, with social relations and satisfaction with health (Converse, 1964). The most volatile values and opinions were those that required an evaluative response such as trust in government, healthcare systems, ethnic diversity versus social cohesion, and solidarity versus hostility (Stimson, 1980).

Analysis of data for testing stability and volatilities in values and opinions

First, descriptive analysis was performed on the data to draw simple comparisons between the changes from wave 1 to wave 2 of the VIC survey. Next, inferential statistical analysis was performed to test the stability or changes across values and opinions, thus, the data from wave 1 & wave 2 were subjected to Kendall's tau-b coefficient analysis to estimate the correlation coefficient to measure the strength of the association of the tested variables from wave 1 and 2. The closer the tau b (τ_b) values are to one (perfect correlation is $\tau_b = 1$), the stronger is the correlation between the values and opinions expressed between the two waves of the survey.

The analysis is based on the following conditions as stipulated by Botsch (2011). Less than + or - 0.10: very weak; + or -0.10 to 0.19: weak; + or - 0.20 to 0.29: moderate; and + or - 0.30 or above: strong.

Findings

Compared to the first wave i.e., during the onset of the COVID-19 in the Maldives, where only a few participants (less than 1%) tested positive for COVID-19, the results from the second wave indicated that 23.2% (n=143) had been infected in

the Maldives, at the time of data collection.

As indicated in Table 2, out of the 1026 participants for wave 1, only 5.7% (n= 58) reported feeling nervous, anxious or on edge nearly every day, while out of 615 participants for wave 2, nearly the same percentage of participants (n=37. 6%) reported feeling the same. On the other hand, for wave 1, 10.8% (n= 111) reported that they were not able to stop or control worrying nearly every day whereas, for wave 2, nearly the same percentage of participants (n=62, 10.1%) reported feeling the same. For wave 1, a few (n=41, 4.0%) reported feeling down, depressed, or hopeless nearly every day as opposed to wave 2 where it has been reported only a one percent increase (n=31, 5%) reporting the same, indicating more people being subjected to feelings of hopeless and experiencing depression as the crisis progressed. In wave 1, 8.2% (n=84) of participants reported experiencing little interest or pleasure in doing things almost every day whereas, in wave 2, this percentage decreased (n= 34, 5.5%). At the time of the wave 1, the country border was closed, a large proportion of employees in the private sector jobs had lost their job or their salaries had been scaled down, there was movement restrictions even within islands, and the greater Male' area was under strict lockdown (Moosa et al., 2020). However, by the time wave 2 was conducted, most of these restrictive measures had been lifted and life had returned to the new normal of mask-wearing as the most restrictive measure. These changes between the two waves could explain the decrease in the number of people feeling a loss of interest or pleasure in doing things. Interestingly, for wave 1, fewer participants (n=77, 7.5%) reported they felt lonely; whereas, for wave 2, 8.1% (n=50) reported feeling the same.

Table 2
Psychological wellbeing of the participants – a comparison of wave 1 & wave 2

	VIC Survey Wave 1		VIC Survey Wave 2	
	Percentage	Frequency	Percentage	Frequency
Feeling nervous, anxious or on edge – nearly everyday	5.7	58	6	37
Not being able to stop or control worrying- nearly everyday	10.8	111	10.1	62
Feeling down, depressed or hopeless - nearly everyday	4.0	41	5	31
Little interest or pleasure in doing things - nearly everyday	8.2	84	5.5	34
Felt lonely - nearly everyday	7.5	77	8.1	50

For wave 1, the data shows that 6.8% (n=70) of the participants reported job loss indicating a higher percentage of people and wave 2 data shows that 10.6% (n=65) of the participants reported job loss indicating more people lost their jobs as the crisis progressed. The responses for wave 1 also indicate that 14.4% (n=148)

of the participants, report that they had to close a business because of the crisis, as compared to wave 2 that reported that nearly the same percentage (n=73, 11.9%) had to close a business. For wave 1, only 2% (n= 18) reported being reduced to part-time employment which was relatively less as compared to wave 2 that reported 14.4% (n=148) being reduced to part-time employment. For wave 1, only 3.0% (n=31) indicated they have accessed a financial support scheme because of job loss as compared to wave 2. These figures almost doubled (n=40, 6.5%) by the time of the second wave, indicating more people had to seek financial aid. The wave 1 data also indicated that 27.7% (n=284) of the participants were doing home- office, because of the crisis, with 19.4% (n=199) stating that they were physically going to work as before the COVID-19 crisis. However, the wave 2 data indicated reduced percentages of the participants (n=71, 11.5% were doing home office, and 62.3% (n=384) stating that they were physically going to work as before the crisis.

Table 3
COVID-19 and economic experiences of the participants – a comparison of wave 1 & wave 2

	VIC Survey Wave 1		VIC Survey Wave 2	
	Percentage	Frequency	Percentage	Frequency
I lost my job due to COVID19-	6.8	70	10.6	65
I had to stop my business due to COVID19-	14.4	148	11.9	73
I had to change to a part-time job due to COVID19-	1.75	18	5.7	35
I have all my job or business responsibilities carried out from home due to COVID19-	27.7	284	11.5	71
I received COVID19-related financial help	3.0	31	6.5	40
Going to work as usual (no changes due to COVID19-)	19.4	199	62.3	384
Staying at home to take care of the kids due to day cares closing	31.5	323	14.6	90
I had to migrate to another island due to COVID19-crisis	-	-	4.9	30

Opinions of people regarding the COVID -19 crisis

A comparison was drawn between the opinions of people during wave 1 and wave 2 of the VIC survey. Participants were asked about their perception on how COVID-19 crisis situation is being handled by the Maldivian government. While 12.8% of participants for wave 1 reported the government was handling the situation very poorly, 14.0% reported the government was handling the situation very well. For wave 2, 14% of the participants responded that the government is handling the situation very poorly while 8.1% reported that the government is handling the situation very well. When asked about the opinions of participants regarding people's behaviour in the country under the imprint of the COVID-19 crisis, for wave 1, 17.5% reported it was very poorly, while only 1.9% reported very well and for wave 2, 14% reported very poorly and only 1.6% indicated very well. When asked about the views on the state of the country when it gets out of the COVID-19 crisis, for wave 1, 33.6% responded they felt the country would be in a very poor state and 19.9% felt otherwise, while for wave 2, 27.8% responded the country would to be in a very poor state and 12.5% reported otherwise Overall, the results shows that there is not much a of a difference between the opinions of the people across the two waves indicating that opinions and values have remained largely stable during the two testing points of the COVID-19 crisis.

Table 4

Opinions of people regarding the COVID -19 crisis – a comparison of wave 1 & wave 2

	VIC Survey Wave 1		VIC Survey Wave 2	
	Percentage		Percentage	
	Very poorly	Very well	Very poorly	Very well
How Maldivian government is handling the COVID19- crisis	12.1	14.0	14	8.1
People's behaviour in our country under the imprint of the COVID19- crisis	17.5	1.9	14	1.6
Views on the state of the country when it gets out of the COVID19- crisis	33.6	19.9	27.8	12.5
Maintaining social distancing and wearing masks	-	-	14.4	14.4

Table 5 shows the results of the analysis with distinctions made for stability in the rank order that is presented in column tau-b. The column stability/ volatility in line with theory (Converse, 1964; Carmine & Stimson, 1980) corroborates if the rank order in individual stability confirms the theoretical values and opinions across the two waves.

Table 5

The nonresponse analysis for wave 2 against wave 1

Values and opinions	Hypothesized value stability / volatility during a crisis	N	Range	Tau- b (distinguishing stability of values and opinions)	Stability/ Volatility in line with theory
1 National Pride	stable	615	1-4	0.252***	In agreement (+)
2 Trust in government		615	1-4	0.219***	contradict (-)
3 Social trust		615	1-4	0.149***	contradict (-)
4 Satisfaction with finances		615	1-10	0.147***	In agreement (+)
5 Trust in health care systems		615	1-4	0.141***	contradict (-)
6 Satisfaction with work-life balance		615	1-10	0.132***	In agreement (+)
7 Left-right political orientation		615	1-10	0.118***	contradict (-)
8 Ethnic diversity vs social cohesion		615	1-10	0.100**	In agreement (+)
9 Solidarity / hostility		615	1-7	0.098**	In agreement (+)
10 Satisfaction with life		615	1-10	0.096**	contradict (-)
11 Satisfaction with social relations		615	1-10	0.079**	contradict (-)
12 Satisfaction with health		615	1-10	0.060*	contradict (-)
13 Importance of religion		615	1-4	-0.248***	In agreement (+)

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Values are sorted by Kendall's tau-b coefficient.

Note: The closer the tau b values are to one (perfect correlation is 1), the stronger is the correlation between the values and opinions expressed between the two waves. Accordingly, looking at the results it is conclusive that there is a moderate to very weak agreement in values and opinions, thus the weakest correlation among the measured variables expressed by the same individual at two different testing points indicating more stability of values and opinions across the two testing points.

The expected stability / volatility of values on the onset and during the COVID-19 crisis ranking is in line with the rankings of values and opinions of Converse (1964) and Carmine and Stimson (1980).

Discussions

From the 13 items that were tested, all the items except for one were in line with theoretical assumptions of rank order in individual stability across the individual values and opinions items from VIC survey wave 1 and 2 indicating the stability in the rank order of values and opinions by individual participants. The results support the psychological theory of stability of values even during times of crisis and also determine behaviours in times of crisis such as the present COVID-19 pandemic (Ibanaz & Sisodia, 2020). This finding is also in line with Schuster et al. (2019) that human values as core motivational constructs tend to remain largely leaning towards stability as opposed to volatility.

Political ideology was found to be in line with theoretical assumption of remaining stable; that is political ideology in terms of left-right political orientation of individuals (Miller and Shanks, 1996). The political left-right orientation was found to be stable ($\tau_b = 0.118$) between the two waves which is also in line with theory that values (Carmine & Stimson, 1980) tend to stay relatively stable even during significant life transitioning events such as the present crisis (Schuster et al., 2019) with multiple life domains being impacted including physical movement (Bardi et al., 2014). Moreover, political stability is considered as part of our core value and as such, forms part of our belief system which is not susceptible to change (Converse, 1964).

The value of social trust was also found to be stable ($\tau_b = 0.149$) across the two waves and is in line with literature confirming the findings of the study done by Converse (1964). The individual-oriented theory of interpersonal trust indicates that trust develops mainly through the moral value systems that are embedded in individuals from a young age (Uslaner, 2008), therefore subjected to little or no change over the course of one's lifetime. Our findings were also in line with the theory that social trust is considered part of a person's core values (Converse, 1964) and remains as one of the most stable values throughout one's life (Sortheix et al., 2019).

Solidarity / hostility values indicated lesser stability as compared to political ideology and social trust with very weak correlations ($\tau_b = 0.098$) between the two waves, indicating instability or prone to value changes of oscillating between individuals leaning towards either anti-social or pro-social at any given point of time between the two waves of the COVID-19 crisis, and is in line with literature (Stimson, 1980). The solidarity / hostility values were one that required an evaluative response and hence, the value assumption leaned towards volatility as

opposed to stability (Carmine & Stimson, 1980).

Trust in health care systems was found to have weak correlations ($r_b = 0.141$) since the wave 1. This could be due to the fact that there were many direct interventions that took place between the waves and decisions made at the policy levels became more prominent for the public as well. Literature suggests that institutional trust is quite an unstable value (Bol et al., 2020). In the case of the present research, it is evidenced that there is still trust given to health care institutions in the Maldives.

Looking at the rest of the rows of the table 5, it is evident that lesser stability is exhibited in values and opinions with very weak correlation for values and preferences such as ethnic diversity vs social cohesion ($r_b = 0.10$) satisfaction with life ($r_b = 0.09$), satisfaction with social relations ($r_b = 0.079$) and satisfaction with health ($r_b = 0.06$), with results indicating very weak correlations. One explanation for satisfaction with health was found to have very weak correlations could have been due to the fear of being contracted with the disease, anxieties over the contact tracing measures, mandatory masks and social distancing measures between the two testing points.

The item, importance given to religion, showed moderate correlations ($r_b = -0.248$) between the two waves recording the highest stability among the values that were measured. Religious values are deeply embedded in our value systems from a very young age and religion related acts such as praying have been considered as spiritually uplifting as well as comforting (Park, 2005) especially for those experiencing stressful events (Chen & Koenig, 2006). The assumptions are that the onset of the COVID-19 crisis could be viewed as a stressful event that could affect the faith system of a person. Strengthened religious beliefs are connected to psychological recovery (Shaw et al., 2005; Carmil & Breznitz, 1991; Schuster, 2001). Thus, the theoretical assumption based on individual religious beliefs to be a core and stable value, is also in line with theoretical assumptions of remaining stable.

In sum, it is evident for Maldives, the COVID-19 crisis at the onset and amidst has not really changed the values and opinions drastically for people between the two VIC survey waves of the COVID-19 crisis.

Conclusion

It's important to consider public opinions to open avenues for political and societal reform to take place. The results reported from the present research indicates the changes in values and opinions were quite restrained. Sociologists (Matthewman & Huppertz, 2021; Rasul et al., 2021) who predicted vast changes before and after the COVID-19 failed to consider how restrained the human values can be even in the face of a crisis such as the COVID-19 pandemic. Inglehart (1985) has pointed out that core values may temporarily change in response to external threats such as the case of the present crisis.

The study is not without its limitations. The study is based on public opinion research and hence, subjected to mere reaction answers to the crisis. Additionally, the Maldivian government providing monetary benefits to those affected by the crisis could have left some values unaffected. Hence, the question whether the findings of the study could be generalised for other countries remains open for discussion. The main aim and the research question of this study was directed

towards understanding in terms of item (values and opinion) changes across two testing points and whether it is in line with literature rather than in depth analysis of demographics with value changes hence, future studies can provide a more segmented analysis based on human value models. With the third wave to be commenced after the current crisis has subsided and things return to normal, it is hoped that a more comprehensive overview can be provided of how values and opinions have shifted or remained stable over the course of the COVID-19 crisis in the Maldives.

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