Limitations, Suggestions for Practitioners and Researchers, Conclusion
Limitations of the Study

We would like to point out the following Limitations to this study. One possible area where the user-practitioner has to be careful about is the accuracy of the data collected for preparing the frequencies for the preceding period. If the concerned organization ‘fudges’ or does not report this information accurately, the CI value could yield a false sense of complacency. Another area is the need for regular updating of the weightage data. The irregularities used for forming the conceptual framework keep changing with time, though very gradually. For instance, as the organizations move farther and farther into e-tendering, e-procurements etc., the irregularities related to the physicalities of the tendering process will become less frequent, and those related to the e-commerce aspects of the transactions will become more common. Similarly the CVC guidelines as they existed at the time of preparing this index may cease to be mere guidelines and may become mandatory practices, in which case they need to be taken out of the list of guidelines. More guidelines may be issued by CVC and may find their position in the tool. Thus it makes sense that the preparation of the Index and its use in measuring the Corruptance values need to be a regularly done systematic procedure built into the annual calendar of the regulatory body for it to remain relevant and effective, with annual review, updating of the irregularities/guidelines data, assessment of weights and frequencies and the final calculation of the index scheduled as an important annual exercise, much in the same manner as done by other Indices such as CPI of Transparency International. One other limitation that we have identified is with regard to the number of Ethics Resources we identified from literature. We have given exhaustive descriptions in the preceding pages about how the ERs were identified, the rather scant nature of the literature in this regard, the additional efforts such as analysis of the other Indices’
conceptual backgrounds, the semi-structured interviews with experts etc. The validity of the linkage of 102 items from the data collection with the five ERs is one small area where further scrutiny could be considered. Though this is not a limitation as such we feel that this particular process which was carried out by domain experts could be further bolstered by other methods to improve the robustness of the exercise.

**Applications for Practitioners**

In Corruptance Index we present for the first time an organization-level tool for assessing the anti-corruption preparedness of a modern business organization, based on theoretical foundations and from *an ex ante, preventive and predictive* perspective. The Index is *different from and superior to other Indices* measuring corruption. Firstly, the CI does not measure the perception of corruption but the *vulnerability* to it. Secondly this tool works at *organization* level, with potential to be used at sector level, SBU level, department level, and even activity level; whereas the existing Indices are used only at country or economy levels. Annexure VIII shows the CI values for the responding organizations, here assessed at six stages of the business activity of public procurement: the pre-tender level, the tendering stage, the tender processing stage, the post tender stage and the post tender monitoring stage, as well as the infrastructure level of the organization. Going further deep, Annexure IX shows the CI values for the same organizations analyzed across the 19 individual stages/processes of the procurement process. The tool is therefore seen to be flexible and versatile. While the other indices measure merely the perceptions of individuals, even maybe experts, CI is built from actual nuts and bolts of the systems and procedures of the organization and gives a true, clear and accurate scan or snapshot of the current state of health of the organization in this context, irrespective of who does the assessing.
For practitioners, *firstly*, this tool itself could be tested for reliability in various SOEs in other sectors not yet covered in this exercise. This tool is developed based on irregularities in public procurements and we have taken care to reiterate that public procurements encompass all kinds of purchase/hiring/leasing/recruiting/renting/loaning/selling/disposing etc. activities. Yet there could still be sensitive activities which are performed by the organization which do not fall under the gamut of public procurements. This tool may be tested in such organizations with necessary alterations in both the ‘weightages’ and the ‘frequencies’.

*Secondly*, the Corruptance Index could be checked for applicability in private, for profit, non-governmental, and not-for-profit organizations. It would appear that the tool should hold good in any type of organization where the activity conducted is ‘sensitive’ as defined in our discussions above.

*Thirdly*, this tool has applications for users other than organization-level practitioners in oversight, such as regulatory bodies, organization’s Boards, Audit Committees, Government departments controlling SOEs and regulating private companies, Industry and Sector level bodies like Industry Chambers and Associations, and other stakeholders who are concerned about the functioning of organizations. This sort of assessing this vulnerability, grading, ranking and publishing these index values would itself spur the organizations to better their systems and procedures and improve their rankings, corporate image as well as competitiveness.

**Suggestions for Continued Research**

Several points for continued action from both researchers as well as practitioners are suggested by this work.
**Pointers from the literature survey:** 1). Most importantly, as we pointed out at the beginning of this study, we live in a society of organizations, and the modern business (and other) organizations are running practically every conceivable activity and enterprise. Acts of an unethical nature performed in or by organizations have serious effects on the society and the future of the world as we know it, at a much more significant level than those by individuals in non-organizational settings. Therefore, while this paper was an effort to try to suggest a means to form a *preventive and predictive* tool against corruption based on the organization's own processes and systems, there is a pressing need for more efforts for scrutiny into corruption at the organization level, that too from a preventive, ex ante perspective. After a corrupt act and its repercussions have been exposed and ‘post-mortem’ed, it is common enough to analyze what went wrong and how the world perceives it. It is however, much more important to analyze the systems and processes of the organization *beforehand* and predict the areas that are vulnerable within the organization so that timely preventive action can be taken. Therein lies the significance of this study, and the need to push this further.

2). In much of the literature we studied at the streams of Ethics and Corruption have been looked at separately, though it is obvious that corruption, particularly in the organizational context, is one of the more ‘virulent’ (from Ashforth et al, 2008) forms of unethical behavior. Through this paper we have attempted to build a bridge between the two, linking the Ethics Resources of organizations with the actual corruption case data, and went on to make a scholar-practitioner tool out of this now-clearly established relationship. We suggest that these thoughts may be further looked at by Researchers in both domains.

3). It has been pointed out that the current management literature is atomized in that existing models of negative organizational behaviors focus mainly on static individual traits
and behaviors and the individual, interpersonal, and group level factors that influence them. (Ashforth et al, 2008). The resulting views are relatively narrow leading to a relative neglect of the role of processes and systems (Brass, Butterfield & Skaggs 1998). A systemic view is obviously important because corruption appears to thrive in particular organization, industry, and national environments (Ashforth et al, 2008). Our work has attempted to make a systemic and processual view of the phenomenon at the organization level and more such studies are very much the need of the hour.

4). While analyzing the Culture perspectives on corruption we saw that notably absent from the literature to date is an explicit examination of the possible relationship between national culture (beyond those identified under institutional factors), professed religious beliefs (beyond the Protestant Christian faith), and the level of perceived corruption in a country (Mensah 2014). Some of the few efforts in this direction seen in literature have been mentioned in our discussions, but there is clearly a need for more in depth studies in this area in different cultural contexts.

5). We have initiated a discussion in this paper for closer looks at Ethics Resources, Moderators and Precursors to OC. These three phenomena are also comparatively less scrutinized and theorized upon. We have suggested Counterproductive Workplace Behavior, Organizational Misbehavior and Rude Behavior as Precursors to Organizational Corruption. At the same time, occurrence of CWB, OM or RB with increasing intensity by itself need not mean that acts of Corruption are definitely afoot. However, organizations and regulatory bodies would do well to exercise due diligence in such eventualities. This is also another area where academic scrutiny is required on the relationship between the occurrences of the other misconducts of CWB/OM/RB with occurrence of OC. Regarding precursors being ‘red flag’ alerts, it is generally the in-house or external audit teams, the oversight or vigilance departments or the regulatory bodies which normally notice the tell-tale signs of an on-going
or coming incident of possible ethics violation in an organization or sector/industry. We suggest that there is a need for further academic research into this emerging area of precursors to corruption which can be of considerable interest to scholars and practitioners alike. Another related possible paradigm, which came up in our searches and discussions is what we could tentatively call ‘Unethical Resources’ in organizations. These may be antithesis to the concepts of ERs and include such entrenched negative factors within the organization such as established informal practices, vested interests, coteries, etc. which weaken the ERs and promote unethical behavior. This is another possible line for continued research.

6). As pointed out by Svensson (2006) there is a need to study the differential effects of corruption as an important area for research. For example, China and India have both been able to show fast rates of growth while being ranked high (or among the most corrupt nations) in the Transparency International’s Corruption Perception Index. Is corruption less harmful in these countries? Or would they have grown faster if corruption had been lower? More work is required along what context and type of corruption matters more (Svensson 2006).

**Pointers from the Corruptance Index development: 7).** In this work we have introduced the concept of Corruptance drawing pointers from theories on organizational corruption and suggested a method to develop a Corruptance Index to grade, compare and contrast organizations. This study was based on linking theoretical concepts on organization corruption with actual case data on cases of organizational corruption in the area of public procurements in State-Owned Enterprises in India. We have also shown the flexibility of this tool by which it can be used to study systems and processes at organizational level, department or domain level and at activity level. The theoretical construct as well as the
index can now be analyzed in other environments. For instance, the model can be tested in SOEs as well as privately owned organizations in other economies. Though public procurements encompass almost all types of purchases and sales including manpower hiring, contracting etc., there could be other types of sensitive activities that could be looked at, such as religious organizations, not-for profit undertakings, etc.

8). We have based our theoretical framework on Ethics Resources in organizations based on Beeri et al (2013). To the three ERs suggested by (Beeri, Dayan, Vigoda-Gadot, & Werner, 2013) we added two more, one each from the concepts suggested by Sohail & Cavill, (2008) and Thai (2008). To confirm if there are any other ERs or similar concepts we have carried out a thorough scan of extant literature on Organizational Corruption as well as scrutinized the theoretical constructs (wherever available) behind several practitioner indices of corruption such as Corruption Perception Index, Control of Corruption Index and others. To further bolster our findings, we have also carried out a number of semi-structured interviews with experts in the field of ethical oversight in India, before finalizing our list of five ERs. However, for further rigor, we decided to carry out a factor analysis on this distribution using SPSS (Principal Component Analysis), and the results suggest that there may be more ERs to be pinpointed. We would still like to suggest further studies in this direction to see if more ERs or similar paradigms can be identified so as to further strengthen the basic concepts behind the idea of Corruptance.

9). Finally, about the reliability and validity of the Index itself. In the earlier discussions, we have pointed out that the conventional procedures used to assess the validity and reliability of scales composed of reflective indicators (e.g. Factor Analysis and Assessment of Internal Consistency) are not appropriate for composite variables (i.e. Indexes) with formative indicators (Diamantopoulos, 2001) . We have also shown how the real
validity of this newly constructed tool can emerge over the next few years of continuous use of the tool in the same organization and correlating the calculated values of corruptance with the observed levels of number of corruption cases investigated, punishments imposed, complaints handled etc., in the same periods. This is another aspect that can be taken up over the coming years as continued research.

10). We had started with an in-depth literature survey simultaneously looking at two broad streams of research in this area – Ethics and Corruption. We observed that these two streams have, by and large, been studied separately by researchers. By linking the Ethics Resources from one stream with corruption case data from the other stream we have attempted to build a bridge (or a canal) between these two streams. This linkage, we hope, serves to extend the concepts from the research from our work in the SOE domain into other domains including private (for profit), not for profit, NGOs and other formal business organizations across national boundaries. We recommend extension of this line of discussion further, from the perspective of the Index developed as well.

**Conclusion**

Ensuing from a detailed review and synthesis of literature on COC as well as linking data on actual corruption cases from a regulatory body, this paper puts forth the concept of Corruptance in organizations and a Corruptance Index, which helps to assess organizations’ vulnerability to corruption. We started with several questions such as “Is it possible to derive from theory, certain variables from the structure, and environment of organizations, which can point towards the organization’s corruption vulnerability or anticorruption preparedness?” “Is it possible to assess an organization’s vulnerability to corruption?; and, “Is it possible to grade and compare multiple organizations’ relative preparedness against corruption?” We have shown through the term Corruptance (the assessed vulnerability of the
systems and procedures of the organization to the risk of corruption; or lack of preparedness of the systems and procedures to the threat of internal corrupt activity), how the above questions can be answered. We attempted to generate from theory, a model to link the theoretical concepts of Ethical behavior and COC with data on actual corruption cases collected from a Regulatory body, which is the defining feature of this scholar-practitioner effort of study. The work also puts forth an agenda for further research as well as several applications for practitioners. We hope that this effort makes a significant contribution to the discussion on one of the most relevant and pressing issues studied world-wide today, Organizational Corruption.