

Bell curve appraisal: A critical view

H. Parshuram^{1,*}, Sandeep Hegde²

¹Professor, ²Associate Professor, Anil Surendra Modi School of Commerce, NMIMS

***Corresponding Author:**

Email: h.parshuram@nmims.edu

Abstract

Basically, the objective of the Bell Curve to institute a customary and established set of causal claims. The methodology of the bell curve is typical of much of current and modern-day social science and is therefore fundamentally and intrinsically defective. Better methods are of course available for causal inference from observational data. However, those methods would not yield causal conclusions from the data used in the formal analyses in The Bell Curve. When combined with common sense and other information in terms of qualitative data, the analysis of the findings of the Bell Curve would possibly be more meaningful and practical in the present context of a highly competitive world.

The arguments in favour of the Bell Curve are: first, that intelligence is largely inherited, fixed, and distributed unequally across groups; second, that it is represented by a single measure of reasoning and rational ability (the General Intelligence, or, the *g* factor) that is predictive of life success; and third, that it is not substantially affected by education, health care, or other environmental factors. However, it is very well known that (a) education makes a profound difference in attainment; (b) educational opportunities are more unequally distributed and (c) when employees have equal access to high-quality resources, trainers and training, as well as conducive environment for growth, disparities in achievements narrow sharply.

Keywords: Globalization, Normal Curve, Appraisal, Bench Mark, Product Quality, Performance Quality

Introduction

Charles Darwin had said: 'In the struggle for survival, the fittest win at the expense of their rivals because they succeed in adapting themselves best to their environment'. If one contemplates on the statement made by Darwin, one would realize that it is aptly applicable to a business organization, or to an individual. Globalization and global competition has forced many organizations to adopt various methods whereby resource management is done in a productive and cost-effective manner.

Today, organizations view employees as important factor that acts as a tape-measure to gauge a company's performance. In order to assess the performance, apparently on an objective basis, companies are developing innovative ways to measure their performance. This is more for improving the effective utilization of manpower and rewarding those employees who are possibly more involved in contributing to company's betterment. Therefore, from a company's viewpoint, the various appraisal systems have become necessary to analyze every employee's fruitful contribution to meet the company's objective.

Bell-curve mode of appraisal

Several companies have resorted to the Bell Curve method to assess the employees' performance. Bell curve (i.e., the 'normal' distribution curve) is to be viewed more as a forced ranking system imposed upon each and every employee by the organization. This bell-curve mode of appraisal has been introduced to categorize best and worst performers because today, it is important for a company to thrive and develop itself in this heavily competitive world.

The underlying basic assumption of the Bell Curve mode of appraisal is that the workforce whose appraisal is being considered, is engaged in similar type of activity. The best performers, the average performers and the poor performers are all divided into top 10%, average 80% and bottom 10%. The percentage may differ depending upon the type of organization and the outlook of the management of the company.

It is generally believed that the 'high grade' performers are the ones who significantly contribute to the company's growth. It is further felt that this category deserves accolades and are required to be recipients of various benefits. The 'middle grade' category level of employees are large in number. It is believed that they contribute more to the uninterrupted work and information flow within an organization. Training could also be recommended to these set of employees to enhance their performance levels.

The 'bottom grade' employees are considered to be poor performers. They either require special training, or face the possibility of being discarded by the organization. These employees in the lower grade are, in a way, served a warning notice to make efforts to drastically improve upon their skills in terms of improving their performance, or be prepared to be shown the door.

The Bell-Curve mode of appraisal assumes that employees would be possibly goaded to improve upon their skills by use of productive techniques. It will apparently 'push' the employees into moving forward and aiming higher. These employees would inherently and probably work harder to reach the benchmark set by the company whereby the company's goals and objectives would be met. It is also assumed that it will

energize the employees to take crucial decisions and develop the required skills to execute and deliver the promises on time. Therefore, the benchmarks set by the company will help it to recognize key talents who help to achieve and reach the objectives laid down.

Limitations and apprehensions regarding bell-curve

But one of the greatest disadvantages of this system of Bell-Curve is the blind acceptance of the appraisals/analysis performed by the immediate supervisors regarding their juniors. These supervisors are assumed to be as benchmarks and 'performance-bars' themselves. The ability, the efficiency and the objectiveness of the supervisors performing these appraisals is hardly questioned or doubted. The supervisor is expected and is required to maintain detailed *day-to-day report* regarding the performance of each employee both, favorable as well as unfavorable. However generally speaking, this is not done in most of the cases.

The ground reality is that, only at the time of actual submission of the appraisal report to the HR head, the supervisor fills the appraisal report. This can give rise to several biased and prejudiced errors which can go against the employees due to which, unfortunately, the employees are dumped the lower grade category.

The biasedness and the favoritism on the part of the supervisors would then be glaringly obvious. Such appraisals would result in having have a serious demotivating effect on the entire workforce. There will, therefore, be a huge gap regarding what was expected of a Bell-Curve appraisal and what actually takes place at the ground level.

This single-system of appraisal by the use of the Bell-Curve can give rise to several false reports. These reports would have a negative effect on the entire workforce. For example, in the case of I.T. companies, it would possibly be unfair to fit a small group of employees who are engaged in an important project, to be fitted on a Bell-Curve to measure their performance. Even good employees would be forced to be down-graded in the Bell-Curve appraisal.

In the education sector too, where the Bell-Curve is used to grade students, the gross injustice being done to students is glaringly obvious. The assumption that only a few can receive high grades and the majority average grades, is in itself flawed. The sincerity, the hard work put in by students, etc., are not 'fed' to the Bell-Curve. Only 'actual marks' obtained by students are recorded and used for 'analysis'.

Further, the Bell Curve application in establishing performance of quality standards in a product in a manufacturing organization is totally different when it comes to application of Bell-Curve's forced ranking to the human mind. Product Quality and Performance Quality are not comparable.

As a point of debatable discussion, the persons who are appointed, or, deputed to appraise sub-ordinates should also, necessarily, be appraised by those who are being appraised by them. If curves, bell or otherwise, have to be fitted to judge performance, then the 'bell curvatures' of both, the appraiser and the appraised have to be studied together, to get a reasonably correct and objective picture of the appraisals. But the catch is who is competent enough to judge these curvilinear appraisals? Hence, it implies that the Bell-Curves of those who are now sitting on the judgment seat should also have to be gauged and studied first! The process of pros and cons will go on.

More important than the Bell-Curve, it is pertinent that Organizations look deeply into the performance of employees in terms of their attitude towards the work. Qualities of humility, respect for colleagues, for juniors and superiors, sincerity towards work, and so on, are equally important in terms of assessment of performance.

Conclusion

Arguably, the arguments, for and against, will never end. The superiors (calling them as 'higher-ups', merely in terms of the positions they occupy) assume they are 'superior' enough to perform objective, unbiased and unprejudiced evaluations and appraisals of others. . Their muddled, mangled minds, filled with likes-dislikes, love-hate, envy, jealousy, and all possible negative emotions, influenced right from their birth and by the environment they grew up in, is now presumed to be probably matured enough to evaluate performances of their sub-ordinates in order to appraise them – that is, to raise them, or, raze them, or, leave them to graze in the present work scenario for some years more!

The following illustration is food-for-thought for Organizational heads. Have we ever observed a mother bringing up a child? Not those ones who are guided by bookish rules and regulations in bringing up children, or, who the one ones who are influenced by child-counsellors, psychologists, psychiatrists, and the like. I am referring to those who inculcate values by example, by humble explanations, and who are themselves are an epitome of love, patience, understanding, a true blend of the head and heart.

Such a mother will never weigh her child against any bench-mark or tape-measure. When the child does not fare well, or say, fails to reach expected goals, she will encourage him, cajole him, counsel him, share his grief, understand his strengths and proceeds to highlight them, converts his weaknesses into his strengths, works along with him to find other avenues where he can show his capabilities and excel. Haven't we heard about mothers who have had physically challenged children, but by sheer inner resolved grit, brought them up to high standards by understanding them, by knowing and highlighting their strengths, applauding

them all the way (in really sincere manner-not flattering!)? Did these mothers fit their children into a bell-curve and reject them?

Let's consider the example of Thomas Alva Edison. Thomas had a mental illness we would now consider ADHD (Attention Deficit Hyperactive Disorder). His teacher was once heard calling young Edison "addled" (i.e., confused/muddled/rotten). After spending three months in a noisy class room with 38 kids of all ages, Thomas's teacher finally lost his patience with young Thomas's constant questioning. This ended Thomas's formal schooling. His mother, Nancy, who used to teach in Canada, happily took the job of teaching her son Thomas. His mother was very encouraging and taught him to try new things. Thomas later said "My mother was the making of me... She was always so true and sure of me... And always made me feel I had someone to live for and must not disappoint." Now if a Bell-Curve was used to evaluate Edison's performance in school, he would have been in the lowermost grade!

Though the following example may not be so apt in the present context, haven't we also heard of individuals who were physically disabled but due to their tenacity and determination overcame all odds and became world standards, only to shame the fit-and-fiddle 'normal' individuals? Umpteen examples are available today that will stun and awe the reader. If such individuals were fitted into a bell-curve, before their astounding achievements, they would have been, in all probability, discarded unceremoniously! In such cases, bluntly speaking, who would be more 'dumb' (only figuratively please!) – the appraiser or the appraised!

To drive the point home about appraisals, I know of a specific example where a three-year old child was being 'interviewed' for admission to a school. The interviewing teacher showed the child the pictures of a dog, a cat, a horse, a bed, a tooth-brush, and all such day-to-day objects with which the child would have, possibly expectedly, interacted, or say, at least seen. The child kept quizzically looking at the teacher and helplessly to her father who stood next to her. But the child refused to identify any of the objects. The interviewing teacher got up and resignedly told the father that his daughter was not 'educated enough' to be admitted to the school.

Hardly had the teacher turned her back, the child asked her father, "Does the teacher NOT know that the pictures were that of a dog, a cat, a horse,? Why is the teacher asking me?" Now, in the Bell-Curve, if it could be applied in relation to other children who had gone through the interview process, where shall we fit the teacher and where shall we fit the child? Who

should be given the pink slip – the teacher or the child? Extend this concept, albeit with modifications, to those Organizations that is headstrong and apparently convinced about Bell-Curves. We have a case here: **For Whom The Bell-Curve Tolls'?**

References

1. Blaise Cronin. For Whom The Bell Curve Tolls. Journal: Library Journal. Year: 2001. Volume: 126, Issue: 1, Pages: 70 ISSN: 03630277.
2. Charles Murray, Troy Duster, Richard J. Herrnstein. *The Bell-Curve*. Journal: Contemporary Sociology. Year: 1995. Volume: 24, Pages: 158. ISSN: 00943061. ISBN: 0029146739.
3. Clark Glymour. What went wrong? Reflections on Science by observation and the bell-curve. Journal: Philosophy of Science. Year 1998. Volume: 65, Pages: 1-32. ISSN: 00318248. ISBN: 0031-8248.
4. Jaideep Motwani. *Measuring Critical Factors of TQM*. Journal: Measuring Business Excellence. Year: 2001. Volume: 5, Issue: 2, Pages: 207-216 ISSN: 1368-3047 ISBN: 1368304001.
5. James J. Heckman. *Lessons from bell-curve*. Journal: Journal of Political Economy. Year 1995. Vol. 103. Issue 5. Pages 1091-1120 ISSN: 0022-3808 ISBN: 0029146739.
6. John B. Carroll. *Inequality by Design: Cracking the Bell Curve Myth*. Journal: Intelligence. Year: 2002. Volume: 30, Issue: 2, Pages: 214-216. ISSN: 01602896 ISBN: 0691028990\0691028982.
7. Lynn Fendler. Irfan Muzaffar. *The history of the Bell-Curve*: Journal: Educational Theory. Year: 2008. Volume: 58, Issue: 1, Pages: 63-82. ISSN: 00132004.
8. Pillar Corredor, Salome Goni. *TQM and Performance. Is the relationship so obvious?* Journal: Journal of Business Research. Year: 2011. Volume: 64, Issue: 8, Pages: 830-838 ISSN: 01482963 ISBN: 0148-2963.
9. Simon, J.L. *Four Comments on the Bell-Curve*. Journal: Genetica. Year: 1997. Volume: 99. Issue: 2-3, Pages: 199-205 ISSN: 00166707 ISBN: 0016-6707 (Print).
10. Zenderland L.' *The Bell-Curve and the shape of history*: Journal: Journal of the history of behavioral science. Year: 1997. Volume: 33, Issue: 2, Pages: 135-139. ISSN: 0022-5061.
11. <http://www.investopedia.com/terms/b/bell-curve.asp>.
12. https://en.wikipedia.org/wiki/Normal_distribution.
13. <https://empxtrack.com/blog/bell-curve-for-performance-appraisal/>.
14. <http://statistics.about.com/od/HelpandTutorials/a/An-Introduction-To-The-Bell-Curve.html>.
15. <http://math.about.com/od/glossaryofterms/g/Bell-Curve-Normal-Distribution-Defined.html>.
16. <http://www.forbes.com/forbes/welcome/?toURL=http://www.forbes.com/sites/joshbersin/2014/02/19/the-myth-of-the-bell-curve-look-for-the-hyperperformers/&refURL=https://www.google.co.in/&referrer=https://www.google.co.in/>.
17. <http://people.math.sfu.ca/~hebron/archive/1999-2/claw/faq/bellcurve.html>.