Research Paper
Impact Factor: 7.358
Peer Reviewed & Indexed Journal
www.ijmsrr.com

IJMSRR
E- ISSN - 2349-6746
ISSN -2349-6738

A STUDY OF DROP OUT STATUS IN TERTIARY EDUCATION OF INDIA & ABROAD

Jitesh Chandra Saha
Assistant Professor, GDC, Kamalpur, Dhalai, Tripura.

Abstract
Comprehensive understanding of tertiary education progress depends not only upon mere literacy achieved but also upon eligible age group participation, continuation and leave before completion. Enrollment is a good yardstick to reveal people preference for higher education whereas their perseverance for completion gets expressed through dropout. Higher enrolment, more drop-out & greater pass rate indicate lower achievement than all-round improvement in the top rung of education sector. Similarly lower achievements in all those areas cast gloomy impression on its progress. Further, these vary course wise, gender wise and stream wise. From these perspectives, this paper Endeavour to investigate recent status of tertiary education in India & abroad.

Keywords: Higher Education, Enrolment, Drop Out, Out Turn.

Introduction

Significance a very high dropout rate (DRPOR) for an education sector flashes focus on non-fulfillment of students study objectives. This is the Indian picture of education in general. As education level goes higher, DRPOR also becomes higher. It is in the range of one to ten for below tertiary education (TE) to TE students out of hundred enrolled students. A high dropout (DRO) also deters potential students from enrolling by sending a negative message to society, causing gross enrollment ratio (GER) to fall even lower.

Objective

1. To investigates present state of TE in terms of enrollment, drop-out, final examination appearance and successful clearance in India & abroad.
2. Data is secondary & annual in nature, derived from Educational Statistics at a Glance (ESAG) by Bureau of Planning, Monitoring & Statistics, New Delhi; Education at a Glance (EAG) by OECD for different years; All India Survey of Higher Education (AISHE) and recent Indian Census database.

Research Questions

1. In terms of dropout, enrollments & turnout, are their differences between Indian TE & below TE?
2. How do various TE levels such as Ph.D., M. Phil., Post Graduate, Undergraduate, PG Diploma,
3. Diplomas, Certificate & Integrated Courses vary in those terms?
4. Then what is the present state of TE in India & abroad?

Review of literature

Knowing GER, POR & DRPOR helps students to select prudently a course as per academic competence and goal of study. According to Altbach et. al. (2009), this will not only enhance employability of such candidates but also nation's ability to get the maximum contribution after completion. Sandoval-Palis et. al. (2020) went further in having awareness about importance of DRO consideration in TE as its absence would linger achievement of SDG by 2030. This called for increase in GER from 25% to 50% and mentioned every effort including scholarship provision, required to

reduce DRO problem (Aithal et. al., 2019). DRO had a relationship with absence of scholarship and usually found to be higher in first & second years of entering TE than afterwards (Wollast et. al., 2018), even greater among part-time candidates at Poland University (Zajac et. al., 2019). Kim et. al. (2018) analysed that DRPOR in South Korea was lowered by provision of better job prospects & scholarships. In view of Altbach et. al. (2009), DRO candidates were from particular social class like disadvantaged groups, vulnerable individuals & minorities while Oza (2019) found blacks' bachelor degree attainment rate was half that of whites, it was further lower for Latino group. Costa (2020) found very high DRPOR in science & engineering students of Brazilian TE whereas Stiburek et. al. (2017) had this in engineering fields & natural sciences of Czech Republic with relatively lower & stable rates in master degrees.

Dwivedi et. al. (2019) showed that average world GER is twenty-seven per cent (pct), close to Indian figure but this was very high in developed countries like Japan, United States & United Kingdom. From accounting of Aina et. al. (2018), DRPOR was found to be relatively low at 31 pct for OECD countries, although its distribution was not homogeneous. Numerical presentation of Sandoval-Palis et. al. (2020) articulated that in OECD countries nearly twelve pct students in full-time bachelor programme dropped out after first year and this number doubled after three years.

Some studies explained factors behind this phenomenon. These range from academic to non-academic events and include both on-campus & off-campus variables. ESAG found DRO among schoolboys was mainly due to engagement in economic activities and among girls due to involvement in domestic activities. Other important factors were financial constraints and children not interested in studies along with marriage for girls only (ESAG, 2018). According to Contini et. al. (2019) & Jeno et. al. (2018), academic incompetence was the most important factor causing DRO in TE. As continuous study & good academic track record reduced DRO chance, DRPOR was higher in distance mode of Brazilian TE (Costa, 2020). To Walsh et. al. (2015), candidate self-confidence was an important determinant for DRO and this got enhanced by homely feelings at educational campus, availability of residential outlets, peer group clubs, academic resources, interaction with parents & counseling facilities (Sandoval-Palis et. al., 2020 & Salmi et. al., 2020). Presently, these are facilitated by online activities even for distant learners. Parental education & student-teacher ratio also played an important role in determining the best period for beginning of DRO (Altbach et. al., 2009). Some authors linked DRO to pre existing backgrounds such as absence of money, asset & wealth. Low-income students could not arrange fees & other necessary living expenses for TE and lacked study time due to involvement in business & other work, leading to DRO (Matsolo et. al., 2018 & Aithal et. al., 2019). Furthermore, they lacked collateral to secure loans & repay debts. This was particularly true for disadvantaged, vulnerable & poorer sections of population, making TE confined to pre existing well - to - do section. Relatively inexpensive & low prospect courses were only available to them. In view of Gupta et. al. (2018), lack of adequate awareness & interest about DRO events at management level also affected this as did misallocation of resources meant for students. Regional distribution of resources & employment opportunities also had a significant impact on deciding about DRO (Mortagy et. al., 2018 & Contini et. al., 2019). Altbach et. al. (2009) presented a gender version of DRO in which females as weaker sex interacted with all those factors and registered lower participation in TE of Ghana & Tanzania. Aina et. al. (2019) found that DRO was caused by negative expectations about net returns to education, individual real skill deficiency & adverse labour market conditions. Factors leading to DRO were very well categorically analysed & mentioned by Sivakumar et. al. (2016) and stipulated those as family problems, adverse campus environment, goal change, home sickness, low placement rate & poor hostel adjustment. Whereas Gupta et. al. (2018) made three classifications of

such factors: malleable factors, non-malleable factors and factors in between. According to them, both malleable & seemingly non-malleable factors had potential to reduce DRO while really non-malleable factors required testing for measuring their possible influence through interaction with malleable ones.

Method

Statistics related to gross enrolment, out turn, exam appearance & pass out variables of available subjects are taken from ESAG & AISHE for the period 2010-2011 to 2019-2020. Assuming course duration of one year (PG Diploma), two years (Post Graduate, M. Phil, Diploma, Certificate), three years (Undergraduate), four years (Integrated) & five years (PhD), dropout rates are estimated subject wise and at aggregate in respect of enrolment from 2013-2014 to 2019-2020. For foreign countries, a similar kind of analysis is followed on entry rate variables at tertiary level, dropout rate & graduation rate, available at EAG: OECD Indicators from 1998 to 2021. Elementary statistical tools such as percentage & mean are applied along with descriptive analysis.

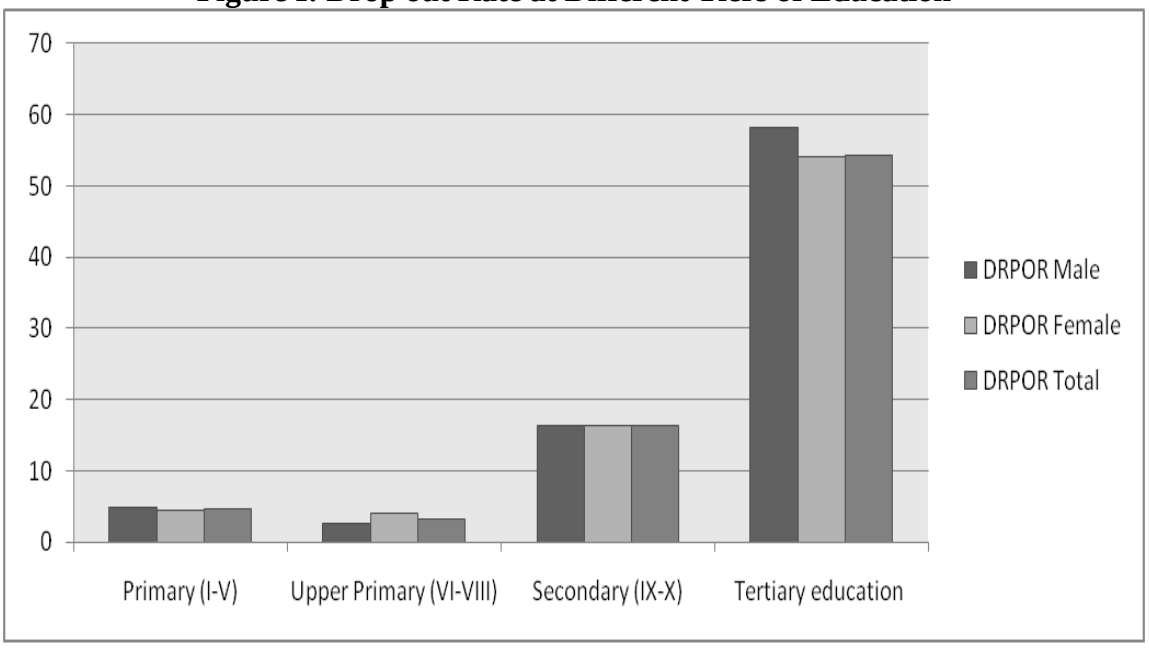
Results

Table I: Average Share of Different Levels of Education

LEVEL	GE	EA	PO	DRO
UG	74.82	70.19	70.77	82.56
PG	12.41	16.50	16.45	10.69
UG + PG	87.23	86.69	87.22	93.26
OTH	9.78	12.52	12.09	8.25

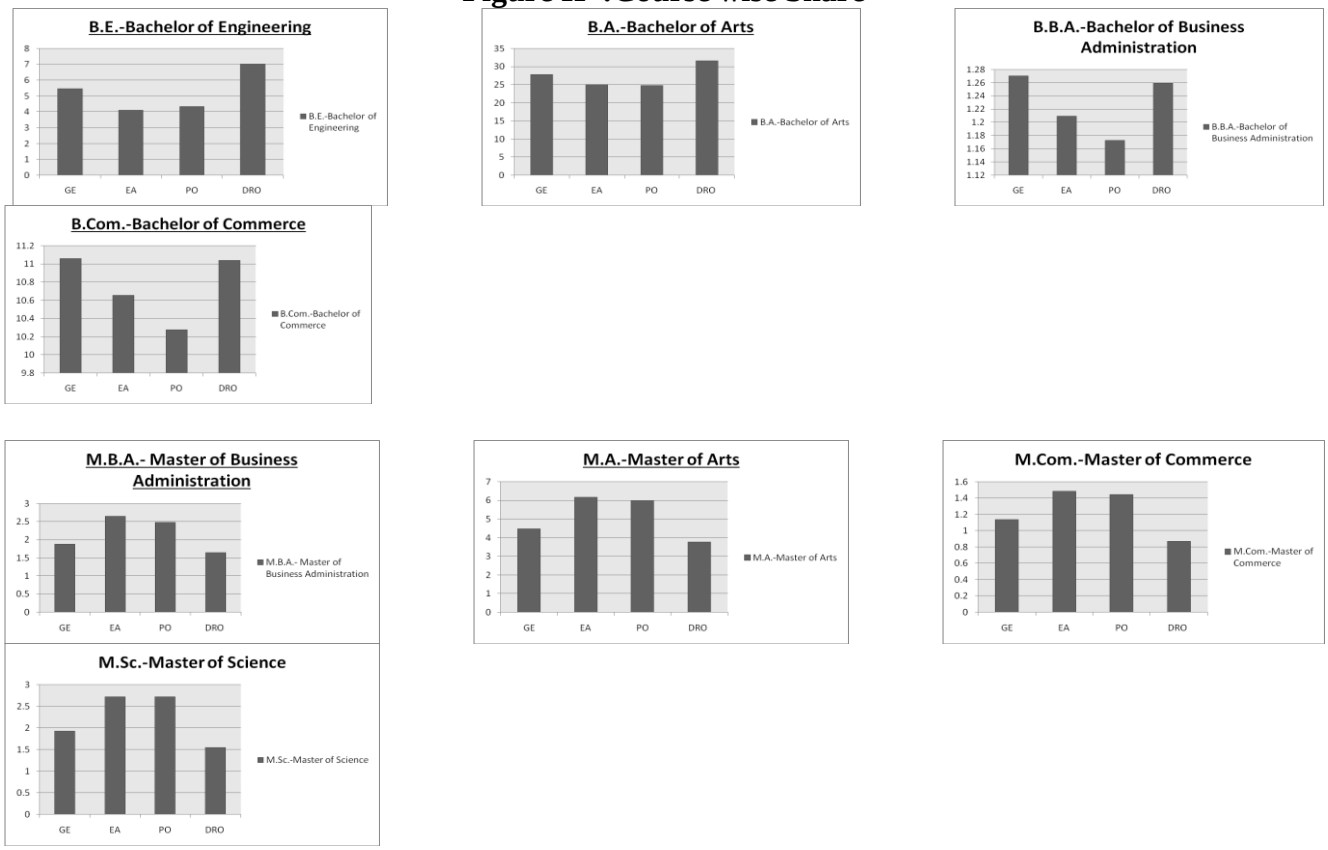
Source: Educational Statistics at a Glance (ESAG) & All India Survey of Higher Education (AISHE). EA – Exam appearance, PO - Pass out, UG - Under graduate, PG - Post graduate, GE - Gross enrolment, DRO - Drop out, OTH – Others.

Figure I: Drop out Rate at Different Tiers of Education



Source: Educational Statistics At A Glance (ESAG) & All India Survey Of Higher Education (AISHE), DRPOR - Drop Out Rate

Figure II :Course wise Share



Source: Educational Statistics at A Glance (ESAG) & All India Survey of Higher Education (AISHE). GE - Gross Enrolment, EA – Exam appearance, PO – Pass out, DRO - Drop out

Figure III Course wise Drop out Rate & Pass out Rate

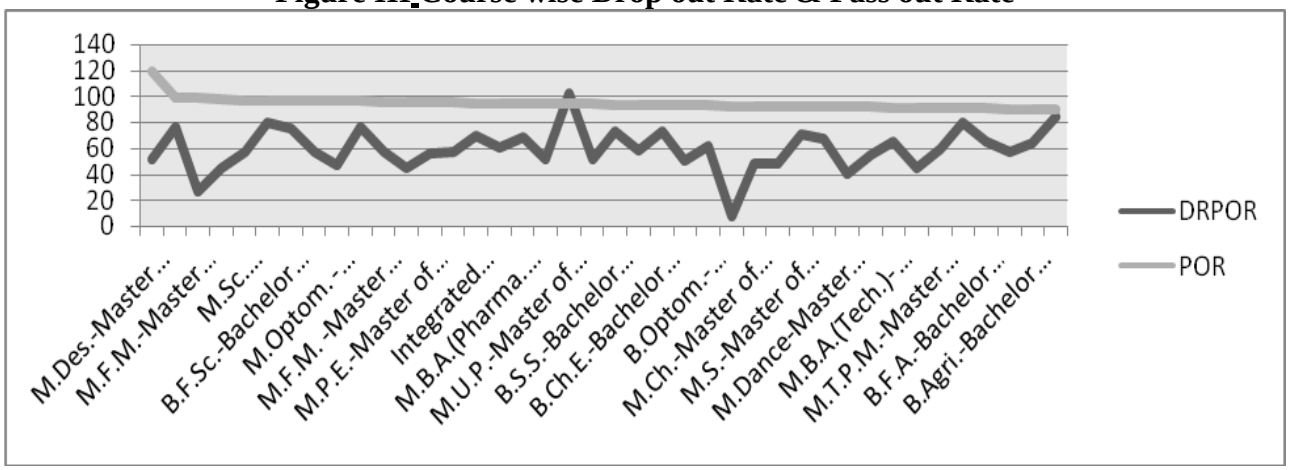


Figure III B

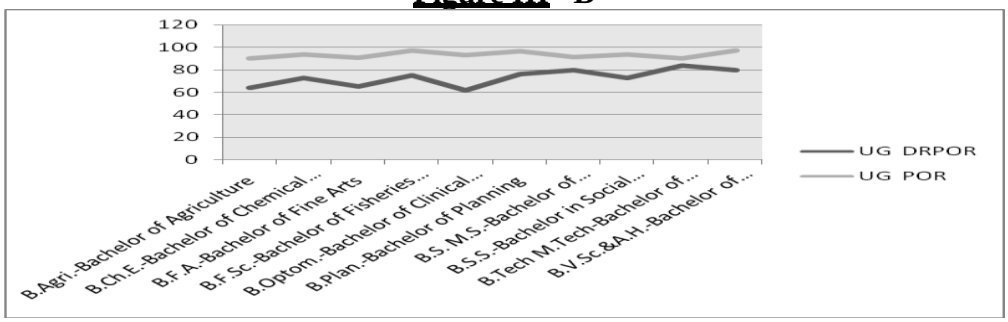
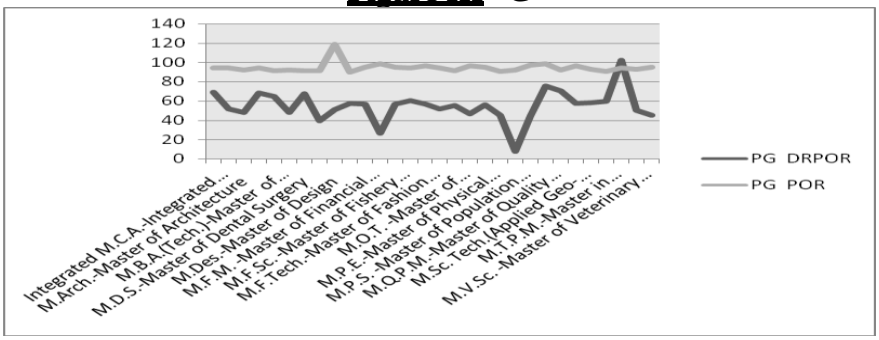
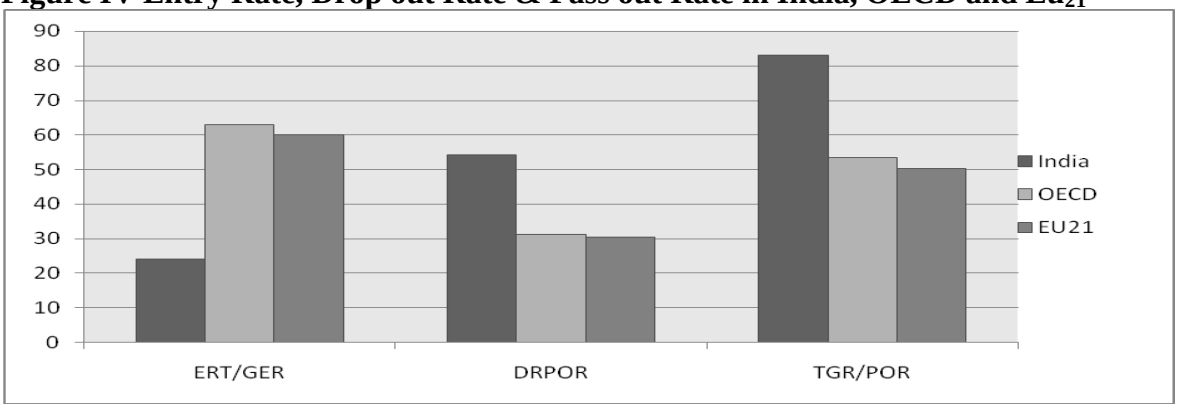


Figure III C



Source: Educational Statistics at a Glance (ESAG) & All India Survey of Higher Education (AISHE). UG - Under Graduate, PG - Post Graduate, DRPOR – Dropout rate, POR - Pass out rate

Figure IV Entry Rate, Drop out Rate & Pass out Rate in India, OECD and Eu_{21}



Source: Educational Statistics at A Glance (ESAG) & Education at a Glance: OECD Indicators (EAG). ERT - Entry rates at the tertiary level, GER - Gross Enrolment Rate, DRPOR - Dropout rate, TGR - Tertiary graduation rate, POR - Pass out rate.

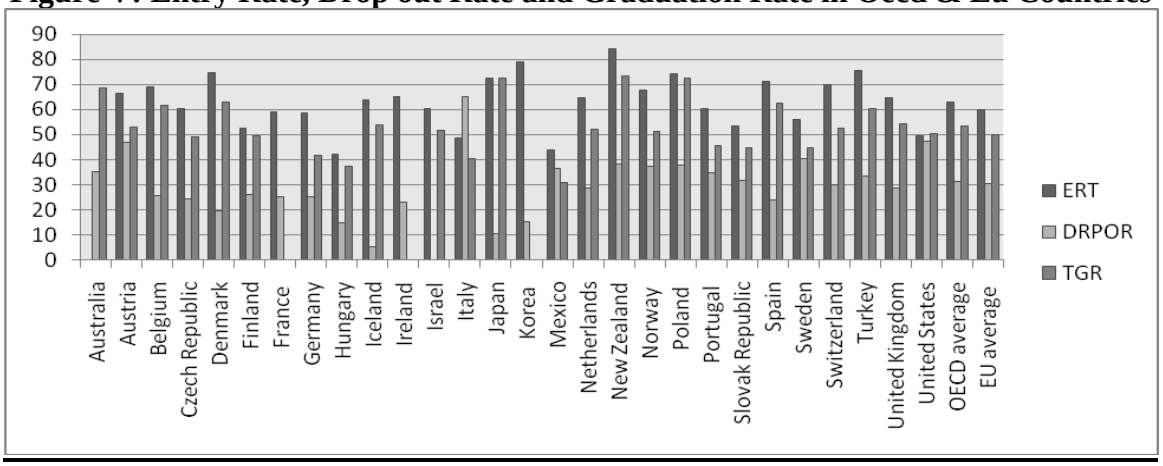
Table II Courses With Above Eighty Five Per Cent of Enrolment, Drop Out

Sl No.	> Eighty Five Pct Of Ge, Ea, Po And Dro
1.	B.A.(Hons) - Bachelor of Arts (Honours)
2.	B.A. - Bachelor of Arts
3.	B.B.A. - Bachelor of Business Administration
4.	B.C.A. - Bachelor of Computer Applications
5.	B.Com. - Bachelor of Commerce

6.	B.E. - Bachelor of Engineering
7.	B.Ed. - Bachelor of Education
8.	B.Sc.(Hons) - Bachelor of Science (Honours)
9.	B.Sc. - Bachelor of Science
10.	B. Tech. - Bachelor of Technology
11.	D.Ed. - Diploma in Education
12.	Diploma
13.	M.A. - Master of Arts
14.	M.B.A. - Master of Business Administration
15.	M.Com. - Master of Commerce
16.	M.Sc. - Master of Science
17.	PG Diploma - Post Graduate Diploma

Source: Educational Statistics at a Glance (ESAG) & All India Survey of Higher Education (AISHE). GE – Gross Enrolment, EA – Exam Appearance, DRO - Drop out, PO - Pass out.

Figure V: Entry Rate, Drop out Rate and Graduation Rate in Oecd & Eu Countries



Source: Education at a Glance: OECD Indicators (EAG). ERT - Entry rates at tertiary level, DRPOR - Dropout rate, TGR - Tertiary graduation rate.

Findings: Students of Indian TE are mostly enrolled in undergraduate & post graduate programs. Collectively, this is approximately ninety pct. Overall DRPOR hovers around fifty-five pct. Students make the maximum DRO in the second highest level of TE. (ESAG & AISHE).

When DRO consideration is combined with GER & examination pass pct, issue of missing incomplete literates in tertiary sphere becomes clearer. GER is only about twenty-five pct in TE while this is near one hundred pct in primary & upper primary, eighty & fifty-six pct in secondary and senior secondary level respectively. DRPOR is around fourteen pct in Class X & TE (UG, fifteen pct & PG, thirteen pct), in Class XII it is not even one pct (.3 pct) but exam appearance & pass out statistics show wide divergence: in Class X & XII, these are far above forty pct whereas in UG & PG programme combined, this is around ten pct (ESAG & AISHE).

Figure I show that DRPOR is consistently higher for males than females at all levels except upper primary. Exceptionally higher DRPOR for females of TE are found in B.A. B.Ed., B.Sc. B.Ed., B.Sc.

in law, Certified Public Accountant, D. Litt., Doctor of Medicine, D. Voc., Doctor of Laws, Master of Chirurgiae, Master of Design, Master of Foreign Trade, Master of Laws, Master of Optometry, Master of Population Studies, Medical Microbiology, Medical Pharmacology, M.Sc. Tech. & M. Stat. (ESAG & AISHE).

Major share of GE in TE belongs to UG & PG jointly and similar shares exist in exam appearance (EA) & pass out (PO). In respect of DRO, it is even higher at approximately ninety-three pct. Separately in UG & PG, as given in Table I, these are above seventy and ten pct respectively (ESAG & AISHE).

Only seventeen subjects, as listed in Table II, show more than 85 pct of GE, EA, PO & DRO. More than half the total GE comes from three subjects: B.A., B.Sc., & B.Com. and this is true in respect of DRO also. Although higher DRO shares exist in diploma, B. Tech. & B.E. subjects, greater EA & PO shares are found in subjects such as M.A. A graphical representation of all these subjects reveals that DRO share is relatively higher for B.A. (Hons), B.A., B.C.A., B.E., B.Sc. (Hons) & B. Tech. whereas opposite implying good achievement prevails in B.Ed., D.Ed., M.A. & M.B.A. In the remaining four courses: B. Com., B.Sc., B.B.A. & diploma, DRO shares are as high as GE shares (Figure II).

Average DRPOR and POR for one hundred & sixty UG & PG subjects are fifty-five and eighty-two pct respectively. PORs increase from around seventy-nine pct to eighty-eight pct from UG level to PG but DRPORs decrease from around sixty pct to fifty pct. Figures III (B) & (C) show that cleavage between POR & DRPOR is narrower in UG courses than in PG. Forty subjects have more than ninety percent POR and their average DRPOR is around fifty-six percent. These forty subjects consist of only ten UG courses with similar POR but higher DRPOR on average [Figure III (A)]. B.Ed., B. Lib.I.Sc. (Bachelor of Library & Information Science), B. Lib. Sc., B. P. Ed. (Bachelor of Physical Education), B. Sc. B.Ed., B.Sc. (Post Basic), B. Voc., M.Ed., Master of Fashion Management, M. Lib. Sc., M. L. I. Sc. & M. Phil. are some subjects that have good track record in respect of students not dropping out. Whereas DRPOR higher than POR is estimated for Bachelor of Ayurvedic Medicine & Surgery, Bachelor of Business Management, Bachelor of Civil Engineering, B. Chem. Tech., B.Com. B.Ed., B.L., B.Litt., Bachelor of Science (Physician Assistant and Emergency & Trauma Care Management), B.Sc. (Sericulture), Bachelor of Sridhar Medicine & Surgery and Master of Ayurveda in Medicine & Surgery.

Over the last twenty years, average tertiary entry rate (ERT), DRPOR & tertiary graduation rate (TGR) of Organization for Economic Cooperation & Development (OECD) & European Union (EU) countries have been found to be around sixty-three, thirty-one and fifty-four pct respectively. This implies that their ERT is more than double, DRPOR is around one-half and TGR is approximately two-third relative to Indian average (Figure IV). In terms of eligible age groups, DRPOR is estimated to be around 20% which is close to Indian average DRPOR of 14% but EA & PO are estimated to be 43% and 23% respectively, which are more than double of the Indian UG & PG figures (EAG, ESAG & AISHE).

In OECD & EU countries, nearly fifty pct of TE students study bachelor courses on average (India: seventy eight pct). For Master disciplines, this is twenty pct (India: twelve pct) and for Doctoral students, it is about one & half percent (India: point four pct). In some countries like Australia, Belgium & Slovenia, bachelor student shares are very high while master student shares are very low in Canada, Colombia, Finland, Israel, Japan, Korea, Luxembourg, New Zealand & Turkey. In Greece, students have both these features (EAG).

Between 1996 & 2011, average DRPORs in Iceland, Japan, Hungary & Korea were estimated to be less than half of OECD & EU averages (EAG). Japan, France & Denmark are among the few countries with exceptionally low DRPOR. Performance of Japan is noteworthy not only in overall considerations but also separately for type a programme, type B programme and advanced research programme. Korea & Turkey achieve this in type A & advanced research programmes while Denmark, Ireland & United Kingdom DRPORs are better only in type A programme and for Belgium (Fl.), Germany & Israel, this is found only in type B programme.

Countries are grouped in respect of their ERT, DRPOR & TGR rates, showing their performance relative to average OECD and EU statistics in Figure V. Austria, New Zealand, Norway, Poland & Turkey register better performance than average whereas Finland & Hungary are at opposite end. Better ERT, DRPOR & TGR statistics exist for TE of Belgium, Denmark, Iceland, Japan, Spain, and Switzerland & United Kingdom. On these bases, some similarities are found between TE of India & other foreign countries, with Turkey matching the most (EAG, ESAG & AISHE).

Interpretation

GER & DRPOR of Indian TE are almost one third and double respectively to those of OECD & EU nations. However, when both dropout & passing rate are considered after enrolment, it turns out that although nearly equal number of students clears examinations out of hundred enrolled students but in Indian TE nearly double number of students drops out before that. This implies for Indian TE, problem of students' objective non-fulfillment is more intense than that of examination clearance, for whatever academic & nonacademic reasons.

Conclusion

Dropout rates of tertiary education are higher in India relative to other countries. This is even higher for male students. In general, gross enrollment, dropout rate, exam appearance & pass rate are all more concentrated at undergraduate level in India than at all other layers of tertiary education. Although after enrollment, dropout statistics differ substantially between India & OECD countries, this difference is not that much when viewed in terms of respective population age-group.

References

1. Aina, C., Baici, E., Casalone, G., & Pastore, F. (2018). The economics of university dropouts and delayed graduation: a survey.
2. Aina, C., Baici, E., Casalone, G., & Pastore, F. (2019). Delayed graduation and university dropout: A review of theoretical approaches.
3. Aithal, P. S., & Aithal, S. (2019). Analysis of higher education in Indian National education policy proposal 2019 and its implementation challenges. IJAEML (International Journal of Applied Engineering and Manageme in the Letters), 3 (2), Education.
4. All India Survey of Higher Education (AISHE). Department of Higher Education Ministry of Education, India https://aishe.gov.in.
5. Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2019). Trends in global higher education: tracking an academic revolution Brill.
6. Contini, D., Cugnata, F., & Scagni,A. (2018). Social selection in higher education. Enrollment, dropout rates, and timely degree attainment in Italy. Higher Education, 75 (5), pp. 785–808.
7. Costa, H. A. (2020). Determinant factors of evasion in Brazilian private higher education institutes.

8. Delhi, N. (2018). Department of School Education and Literacy Statistics Division Educational Statistics at a Glance [Google Scholar].
9. Dwivedi, V. J., & Joshi, Y. C. (2019). Productivity in 21st Century Indian Higher Education Institutions.-century-80. International Journal of Human Source Management and Research Educational Statistics at a Glance Bureau of Planning, Monitoring, and Statistics, New Delhi.
10. Gupta, S. K., Antony, J., Lacher, F., & Douglas, J. (2020). Lean Six Sigma for reducing student dropouts in higher education–an exploratory study. Total Quality Management and Business Excellence, 31(1-2), pp. 178-193.
11. Indian Census Database Office of the Registrar General of India http:// censusindia.gov.in.
12. Jeno, L. M., Danielsen, A. G., & Raaheim, A. (2018). A prospective investigation of students' academic achievement and dropout in higher education: A self-determination theory approach. Educational Psychology, 38 (9), pp. 1163–1184.
13. Kim, D., & Kim, S. (2018). Sustainable education: analyzing the determinants of university student dropout by nonlinear panel data models Sustainability, 10 (4), p. 954.
14. Matsolo, M. J., Ningpuanyeh, W. C., & Susuman, A. S. (2018). Factors affecting the enrolment rate of students in higher education institutions in the Gauteng province, South Africa. Asian and African Studies, 53 (1), pp. 64-80.
15. Mortagy, Y., Boghikian-Whit by, S., & Helou, I. (2018). An analytical investigation of the characteristics of the dropout students in higher education. Issues in Informing Science and Information Technology, pp. 249-278.
16. OECD (2021), Education at a Glance 2021: OECD Indicators, OECD Publishing, Paris, https://doi.org/10.1787/b35a14e5-en.
17. Oza, P. (2019). Equity and Equality in Higher Education-India Calling. International Journal of Interreligious an: Inter Calling dies, 2 (2), pp. 18-24.
18. Salmi, J., & D'Addio, A. (2021). Policies for achieving inclusion in higher education Policy Reviews in Higher Education, 5 (1), pp. 47–72.
19. Sandoval-Palis, I., Naranjo, D., Vidal, J., & Gilar-Corbi, R. (2020). Early dropout prediction model: A case study of university leveling course students. 9314, Sustainability, 12 (22).
20. Sivakumar, S., Venkataraman, S., & Selvaraj, R. (2016). Predictive modelling of student dropout indicators in educational data mining using an improved decision tree Indian Journal of Science and Technology, 9 (4), pp. 1–5.
21. Stiburek, S., Vlk, A., & Švec, V. (2017). Study of the success and dropout in the higher education policy in Europe and V4 countries. h Journal.
22. Walsh, K. J., & Robinson Kurpius, S. E. (2016). Parental, residential, and self-belief factors influencing academic persistence decisions of college freshmen. Journal of College Student Retention: Research, Theory, and Practice, 18 (1), pp. 49-67.
23. Wollast, R., Boudrenghien, G., Van der Linden, N., Galand, B., Roland, N., Devos, C., & Frenay, M. (2018). Who are the doctoral students who drop out? Factors associated with the rate of doctoral degree completion in universities. International Journal of Higher Education, 7(4), pp. 143-156.
24. Zając, T. Z., & Komendant-Brodowska, A. (2019). Premeditated, dismissed and disenchanted: higher education dropouts in **Poland. Zajcin Tertiary Education and Management, 25 (1).