ROLE OF E-LEARNING AND DIGITAL MEDIA RESOURCES IN EMPLOYABILITY OF MANAGEMENT STUDENTS

Dr. S Radha[1], Dr. J. Michael Mariadhas[2], Dr. A.K.Subramani[3], and Dr. N. Akbar Jan[4]

[1]Assistant Professor (Sl.Gr), Department of Management Studies,
Valliammai Engineering College, Potheri - 603203, Kancheepuram District, Tamil Nadu, India. Email:
radgan2013@gmail.com.

[2]Assistant Professor (Sr. Grade), Department of Management Studies,
Saveetha Engineering College, Thandalam, Chennai – 600105. Tamil Nadu, India.
Email: michaeldhas73@gmail.com.

[3] Associate Professor, Department of Management Studies,
St. Peter's College of Engineering and Technology, Avadi, Chennai – 600054. Tamil Nadu, India.
Email: draksubamani@gmail.com/ aksubramani@gmail.com

[4] Faculty of HRM & OB, ICFAI Business School,
The ICFAI Foundation for Higher Education (Declared as Deemed-to-be University u/s 3 of the UGC Act
1956), Hyderabad, Telangana., India. Email: akbarjan.1975@gmail.com

ABSTRACT

Teaching-Learning is an important process in any society, which faciliates the sharing of knowledge, skill, and attitude by the older generation to the new generation in the society. Enormous technological interventions in the society facilitates lot of innovative tools to simplify the learning process and encourages self-learning among the individuals. The purpose of this paper is to explore the role of e-learning and digital media resources in employability of management students in Chennai city. The survey was conducted among 130 management students from thirteen higher education institutes which offers MBA programme. The primary data collected through the questionnaire was analyzed through frequency analysis and structural equation modeling approach. The results of the study explored that use of e-learning and digital media resources in management education has significant positive impact in employability of management students in Chennai city.
Keywords: e-learning, digital media, management education, employaility, management students

INTRODUCTION

Youth is the most important asset of any country, because during this period the human resource would have its maximum physical and metal abilities to perform the given task. The significant changes in demographic profile of the globe has given greater opportunity to India, which has a largest share of the youth population which may have this advantage for the forthcoming twenty years (Indian Central Statistics office, 2017). According to United Nations (2014) in the report titled 'The power of 1.8 billion' said "28 per cent of India's population is 10 to 24 year-olds, adding that the youth population is growing fastest in the poorest nations. Global number of youths is highest ever".

Youths are dynamic in nature and they acquire most of the skills and orientations for their livelihood during this period. Youth in the country contributes for the growth of the nation through earning wealth. Employability of youth in any nation generally depends on their abilities and competencies to perform any specific work/ occupation/ profession. The individual competencies and abilities to perform a specific occupation/ profession is based on their knowledge, skills, and attitudes (KSAs) in that particular domain.

Generally, in India, the KSAs required to perform a specific work/ occupation is acquired by an individual through formal school education and higher education. The school education is of different standards such as Uniform System of School Education, Matriculation, Central Board of Secondary Education (CBSE), Indian Certificate of Secondary Education (ICSE), etc., similarly the higher education of different categories such as technical, engineering, arts& science, law education, medicine, management, agriculture etc., which as different course and sub categories in short-term, diploma, undergraduate, post-graduate, doctorate level courses. However, there any many individual in India those who are working in unorganized sectors without formal education acquiring KSAs through informal education through learning by doing and they are also able to successful in construction, transportation, agricultural sectors, etc. Apart from this state and Central government departments, Ministry of Micro, Small & Medium Enterprises, non-governmental organizations (NGOs), state and central universities, and industries also offer specific training programmes or short-term certification courses to enhance the employability of rural men and women in specific profession.

India is the world's largest provider of management education. Indian business organizations and multinational organizations in India demands high caliber intellectuals and management executives who can better perform in highly competitive technological business world. The management education in India plays a critical role in developing management executives for the present and future organizations. It also develops entrepreneurs in India who floats technology based startups and employ 10 - 100 people in their firm and contributes for GDP of the nation. AIMA aimed to take the Indian management education system as the second best in the world by 2025.

E-learning is the use of Internet technologies to enhance knowledge and performance. E-learning technologies offer learners control over content, learning sequence, pace of learning, time, and often media, allowing them to tailor their experiences to meet their personal learning objectives. E-Learning and digital sources provides significant contribution in technical (Tariq Banday et al., 2014) medical (Gemma Keefe et al., 2012; Ruiz et al., 2006), management education (Vannie naidu, 2017), etc., The new technologies are teaching tools that can be used to assist academics to enhance their teaching in the classroom (Vannie naidu, 2017). The main objective of this paper is to explore the role of e-learning and digital resources in employability of management graduates in Chennai city.

THEORITICAL FOUNDATION OF THE STUDY
The basic terms and concepts related to the study is discussed in this section.

E-Learning
In general, the term e-learning "is an umbrella term describing any type of learning that depends on or is enhanced by electronic communication using the latest information and communication technologies" (E-Content Report, 2004). According to American Society for Training and Development (ASTD) the term 'e-Learning' can be defined as, "anything delivered, enabled, or mediated by electronic technology for the explicit purpose of learning". It also covers a wide set of applications and processes, such as Web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, intranet/extranet (LAN/WAN), audio-and videotape, satellite broadcast, interactive TV, and CD-ROM.

Digital Media
The term 'Digital media' refers to a digitized content which can be transmitted over the internet or computer networks, which include text, audio, video, and graphics. Example for digital media includes the news from a TV network, newspaper, magazine, etc. that is presented on a Web site or blog can fall into this category. Digital Media indicates the use of Digital Media indicates the use of computer technology to combine various forms of media. Digital Media is electronic media that works using digital codes to create digital audio, digital video or other digital content. This is in contrast to analog media, older technology which uses a continuous signal.

Employability
Generally, the students wish to join in various courses in higher education which would increase their employability in the specific industry. According to Mantz Yorke (2004), the term 'Employability' refers to "a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy'.
Earlier researches evident that the employability of an individual depends upon his/ her Knowledge, Skills, and Attitude (KSAs) in the specific job/ profession.

Knowledge
Organized form of information about particular domain is known as 'Knowledge'. Information evolves to knowledge by the learner's gaining context, perspective and scope about the information. Knowledge is the cognitive processing of information, which encompasses the recall, recognition, understanding, application, and evaluation of facts, patterns, and concepts. In our Indian education system, the knowledge of the students in higher education are examined through written or oral exams where a person documents or explains what they know. Knowledge form the base for the development of skill and attitude of an individual, so that the individual is to apply the skills to perform a task or to modify an attitude (Saikumari et al., 2018).

Skills
The term 'skills' refers to application of knowledge in an effective and efficient manner to perform specific task/ job/ profession. Skills are related to physical and mental ability of an individual to perform a specific activity. Competency and proficiency in the execution of skills requires training and practice. Skills are measured in

terms of speed, precision, and/or technique through observation or monitoring. Skills are usually learned through the transfer of knowledge.

Attitude
The term 'attitude' refers to predisposition behavior of an individual which may create favourable or unfavourable feeling or emotion towards the particular object. A person's attitude can significantly affect feelings, values, appreciation, and motivations towards something. Development or adjustment of a person's attitude may take a considerable amount of time and effort. In general, it is difficult to assess the person's feeling about something. It is even more difficult to measure how much change occurred in a person's attitude as a result of training or educational activities.

Management Education
According to Sen Gupta (2017), "Management education is, by its very nature, professional in contour and design. This means that management education is aimed at augmenting knowledge, skills and attitude (KSA) so that the students who receive such education attain the required KSA to become eligible to be part of a corporate or other sector for further contribution to the economy for its growth".

In India, standard of management education in transformation from traditional teacher-centric learning to student-centric learning through implementation of technology based tools using e-learning and digital learning resources such as Learning Management Systems (LMS), MOOC courses, NPTEL courses, Moodle courses, etc., Management educators in most forms of organizations, from multinational corporations to small business companies, have increasingly engaged in the use of online delivery of instruction (Aguinis & Kraiger, 2009).
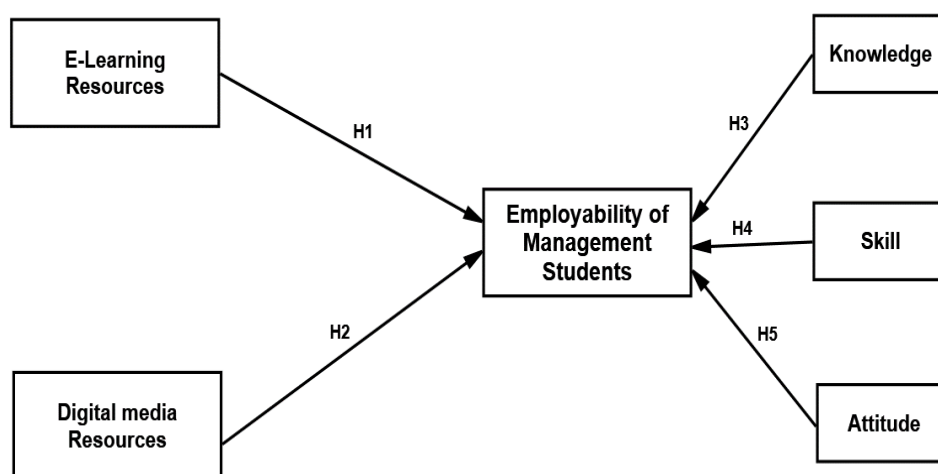
Figure 1. Conceptual Framework of the study

Based on the above model, following hypothesis can be formulated:
H_1: Use of e-learning resources in management education significantly increases the employability of the management students.
H_2: Use of Digital media resources in management education significantly increases the employability of the management students.
H_3: Knowledge development through e-learning and digital media resources in management education significantly increases the employability of the management students.
H_4: Skills development through e-learning and digital media resources in management education significantly increases the employability of the management students.
H_5: Attitude change/ development through e-learning and digital media resources in management education significantly increases the employability of the management students.
The above-mentioned hypothesis are tested through structural equation modeling (SEM) approach.

REVIEW OF LITERATURE
Surya Mahadevan (2017), in his article "Future of Management Education in India" mentioned that the large skew in the quality of students and management Education Institutions makes it very difficult to give one definitive path. The student neither knows the specific sector nuance nor does (s) he have adequate operating knowledge that his job demands. Corporate continue to lament that the students are NOT READY finished

products. This large gap between demand expectations and supply delivery is likely to be bridged with Sector specific curriculum - Custom designed for one sector and not multiple sectors.

Aveek Datta (2016) in his article titled 'Management education has failed in India: Nirmalya Kumar' mentioned that "the traditional model of management education that has been practiced in the country for decades has failed to serve its purpose. None of the Indian universities features among the top 200 in the World University Rankings (brought out by Times Higher Education)".

Angad Singh Thakur (2016) in his article titled, 'E-learning gets a reboot with business education', stated that "online education is recalibrating its focus to target sectors that would benefit the most from it. One such sector in the Indian context is business education"

Gemma Keefe et al., (2012), determined the effectiveness of an e-learning intervention on pain management developed for nursing students. Two variants of an e-learning resource on pain management were developed, each containing the same core content but one with a section focusing on pain assessment and the other on pharmacological management. Results support the effectiveness of the resources independent of voluntary-response bias. Conclusions recommend that introducing e-learning has substantial benefit to enhance pain education in nursing.

Deepak Chawla and Himanshu Joshi (2012), in their paper examined the awareness levels, degree of familiarity and readiness to accept e-learning environment. Exploratory study and personal interviews were conducted to design the instrument which was administered to 240 students pursuing management education at the Indian Institute of Management, Ahmedabad (IIM-A), which is a premier business school in India. A total of 154 duly filled questionnaires were used for data analysis. Factor analysis, cluster analysis and chi-square test were carried out to meet the objectives of the study. Findings - Factor analysis resulted in identification of five factors which were given names. Further, two clusters were identified among the respondents. To examine if the cluster profile varied in demographic variables, a chi-square test showed that none of the demographic variables are statistically related to the clusters. The sample was comprised of students of a business school and therefore it may not be representative of all students studying business management. Second, since the sample comprised only 17 female students, generalization of results is difficult. The research holds relevance, as an assessment of prior exposure to technology and comfort level, attitude, behavior and motivation may determine the e-learners' readiness to adopt or not adopt this medium.

METHODS AND SAMPLES

The research followed exploratory research design which explores the role of e-learning and digital media resources in employability of management students in Chennai city. The primary data of the research was collected through survey method of data collection using self-developed questionnaire. The sampling unit was selected based on the management institutes which offers MBA programmes and also uses e-learning resources and digital learning resources for the delivering the management education. The survey was conducted among thirteen management schools, engineering colleges and Arts & Science colleges located in Chennai city which offers Master of Business Administration (MBA). From each management department or institute ten students were selected using stratified random sampling technique which forms the total sample size of 160.

Table 1. Scale Reliability Analysis Results

Sl. No	Scales	No. of items	Cronbach Alpha	Results
1	E-Learning Resources	10	0.825	Good
2	Digital Learning Resources	10	0.789	Acceptable
3	Employability of the management graduates	15	0.928	Excellent

The reliability and validity of the data collection instrument was tested through pilot study with the sample of 30 and it is found that it is reliable and valid. From the table 1, it is concluded that all the scales selected for the measurement is having adequate reliability.

ANALYSIS AND RESULTS

The primary data collected through the questionnaire was analyzed through descriptive and inferential statistical tools using IBM SPSS 20.0 and IBM AMOS 20.0 software.

Descriptive Statistical Analysis

The demographic profile of the respondents was analyzed through frequency analysis and presented in table 2.

Table 2. Demographic profile of the sampled management graduates

| S. No	Demographic Factors	Frequency	Per cent
1	**Gender**		
	Male	79	60.77
	Female	51	39.23
2	**Category of the institution**		
	Business School	30	23.08
	Arts & Science college	30	23.07
	Engineering College	40	30.77
	Standalone Institution	30	23.08
3	**Under-graduation**		
	Science Degree (B.Sc)	10	7.69
	Arts Degree (B.A)	13	10.00
	Commerce Degree (B.Com)	40	30.77
	Engineering Degree (B.E/ B.Tech)	42	32.31
	Others (BBA/ Hotel Management, etc)	25	19.23
4	**Work Experience (If any)**		
	None	83	63.85
	Up to a year	23	17.68
	1 - 3 Years	19	14.62
	Above 3 Years	5	3.85
5	**Category of E-Learning and Digital Resources used**		
	E-learning communication and Soft skill software	57	43.85
	MOOC online courses	21	16.15
	Moodle courses	12	9.23
	NPTEL courses	23	17.69
	Educational Institute developed software	12	9.23
	Others	5	3.85
6	**Got placement in company**		
	Yes	74	56.92
	Under process (result not announced)	42	32.31
	No	14	10.77
7	**If No, why?**		
	Willing to pursue Higher Education C.A/ M.Phil/ Ph.D	6	42.86
	Willing to do family business / Own startups	4	28.57
	Looking for job in specific industry/ company	4	28.57
		14	100
	Total	**130**	**100.00**

Table 2 presents the demographic profile of the sampled management graduates.

❖ From the above table it is identified that majority (60.77%) of the sampled management graduates are male and rest (39.23%) are female. However, the proportion of female in post-graduation are significantly increasing in this decade including management education.

❖ It is also recognized that 30.77% of them are doing their MBA programme in engineering colleges, whereas 23.08% of them are doing in business schools, 23.07% of them are doing in arts & science colleges, and rest (23.08%) of them are doing in standalone institutions.

- ❖ With regards to the under graduation of the sampled management graduates 7.69% of them have completed their undergraduation in Science discipline, 10% of them in Arts and language related subjects, 30.77% of them in commerce disciplines, around one-third (32.31) of them engineering degrees, and rest (19.23) of them have completed B.B.A, Hotel management, LLB, etc.,
- ❖ The above table also presents their work experience before MBA programme, majority (63.85%) of them don't have any experience before their MBA programme, whereas 17.68% of them have upto 1 year experience, 14.62% of them have 1-3 years of work experience, and only 3.85% of them have more than 3 years of experience.
- ❖ The category of e-learning and digital resources their educational institutions adopted for sharpening the KSA of the management graduates are also tabulated in the above table which describes that 43.85% of them have used E-learning communication and Soft skill software , 17.69% of them have taken NPTEL courses, 16.15% of them have taken MOOC online courses, 9.23% of them have taken Moodle courses, 9.23% of them have used their own educational institute developed software, and rest (3.85%) of them have used some other e-learning software available in internet or in their educational institute at free of cost.
- ❖ With regards to the placement, majority (56.92%) of them have received offer letters through the campus placements or on their own initiatives, whereas 32.31% of them have attended campus placement interviews and awaiting for the results, and 10.77% of them yet to get placements in the company.
- ❖ Out of 14 candidates those who have not received offer letters, six of them are willing to pursue higher education, four of them are willing to do family business / Own startups, and rest of them are Looking for job in specific company/ industry.

Structural Equation Modeling

The structural equation modeling approach was used to explore the relationship between use of e-learning and digital media resources in management education and its impact on employability of management graduates.
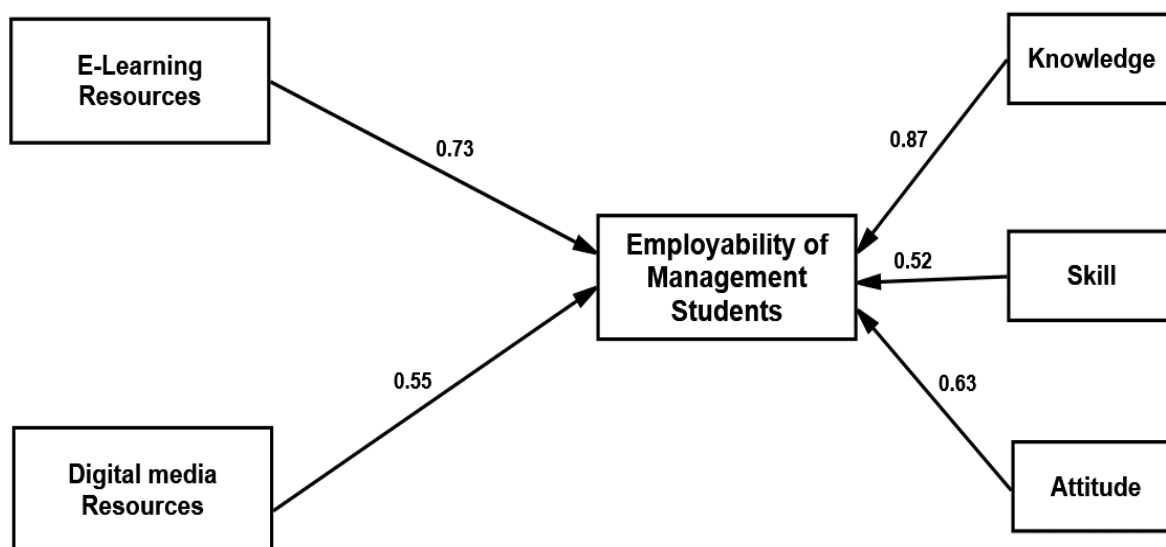
Figure 2. Conceptual Model with standardized regression coefficients**.**

Conceptual Model with standardized regression coefficients of the research is illustrated in figure 2, from which it is found that all the hypothetical relationship are having significant relationship at 1% significant level, therefore all the hypothesis (H_1, H_2, H_3, H_4 and H_5) mentioned in the conceptual model found to be significant at 1% level.

Table 3. SEM- Model Fit Summary

S.NO	Model Fitness Indices	Model Value	Suggested Values	Result
1	CMIN or Chi Square Value	0.213	P > 0.05 (Wheaton et al, 1977)	Good fit
	RMSEA (Root Mean Square Error of Approximation)	0.018	< 0.08 Browne and Cudeck (1993)	Good Fit
	GFI (Goodness of Fit Index))	0.915	> 0.90 Joreskog and Sorbom (1984)	Good fit
2	AGFI (adjusted Goodness of Fit Index)	0.929	> 0.90 Tanaka and Huba (1985)	Good fit
	CFI (Comparative Fit Index)	0.937	> 0.90 Bentler (1990)	Good fit
	TLI (Tucker-Lewis Index)	0.963	> 0.95 Bentler and Bonett (1980)	Good fit
	NFI (Normed Fit Index)	0.986	> 0.95 Bollen (1989)	Good fit
3	Chi-square / DF	3.568	2 to 5 Marsh and Hocevar (1985)	Good Fit
4	RMR (Root Mean Square Residuals)	0.026	< 0.08 (Hair et al. 2006)	Good Fit

(Source: Primary Data)

Table 3 condenses the model fit summary of the structural equation model developed based on the conceptual model. As presented in the above table all the model fitness indices of the developed SEM are at acceptable level, hence it can be concluded that the conceptual model is found to be appropriate fit. The results of Structural Equation Modeling (SEM) proved that the use of e-learning and digital resources are having significant positive impact on employability of the management students at Chennai city.

CONCLUSION

Use of technology in our day-to-day life is inevitable, similarly use of technology oriented products such as ICT tools, e-learning, and digital media resources in our education systems enhances the efficiency of the teaching-learning process and boost the KSA development of the students. From the present research, it is concluded that the use of e-learning and digital media resources in management education has significant positive impact in employability of management students through the development of appropriate KSAs required for the management profession.

REFERENCES

Aveek Datta (2016). Management education has failed in India: Nirmalya Kumar - http://www.forbesindia.com/ article/the-future-of-management-education/management-education-has-failed-in-india-nirmalyakumar/44577/1 accessed on 15th November 2018.

Browne, M.W. & Cudeck, R. (1993). Alternative ways of assessing model fit In: K. A. Bollen and J. S. Long (Eds.), 'Testing structural equation models' (pp. 136-162). Beverly Hills, CA: Sage.

Cater, John James, III; Michel, Norbert; Varela, & Otmar E.(2012). Challenges of Online Learning in Management Education: An Empirical Study, Journal of Applied Management and Entrepreneurship, Vol. 17, No. 4,

Chawla, Deepak & Joshi, Himanshu. (2012). Management education through e-learning in India: An empirical study. Campus-Wide Information Systems. Vol 29, no. 5, pp. 380-393.

Gemma Keefe, & Heather J.Wharrad (2012). Using e-learning to enhance nursing students' pain management education. Nurse Education Today, Volume 32, Issue 8, November 2012, pp. 66-72.

Hair, J., Black, W., Babin, B.& Anderson, R. (2010). Multivariate Data Analysis, 7. Upper Saddle River, NJ, USA: Prentice-Hall, Inc.

Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). Multivariate data analysis, 6th edition, Uppersaddle River, N.J.: Pearson Prentice Hall.

Indian Central Statistics office (2017). Youth in India 2017 - http://mospi.nic.in/sites/default/files/publication_ reports/ Youth_in_India-2017.pdf

Joreskog, K.G. & Sorbom, D. (1982). Recent developments in structural equation modeling, Journal of Marketing Research, pp.404-416.

Naidoo, Vannie. (2017). E-Learning and Management Education at African Universities. 10.4018/978-1-5225-1013-0.ch009.

Ruiz, Jorge G., Mintzer, Michael J., Leipzig, & Rosanne M. (2006). The Impact of E-Learning in Medical Education, Academic Medicine: March 2006 - Volume 81 - Issue 3 - p 207-212.

Saikumari, V, Subramani, A.K., & Akbar Jan, N (2018). Training and organizational performance: the mediating role of e-learning in information technology industry – An empirical study, The Online Journal of Distance Education and e-Learning, Vol. 6, No.3, July 2018, pp. 77-83.

Sen Gupta, A K (2017). Management Education in India: What Lies Ahead, http://www.freepressjournal.in/education/management-education-in-india-what-lies-ahead/1073395

Tanaka, J.S. & Huba, G.J. (1989). A general coefficient of determination for covariance structure models under arbitrary GLS estimation, British Journal of Mathematical and Statistical Psychology, Vol. 42, No.2, pp.233-239.

Tariq Bandaya M, Musavir Ahmed, & Tariq R. Janc (2014). Applications of e-Learning in Engineering Education: A Case Study, Procedia - Social and Behavioral Sciences, Volume 123, 20 March 2014, pp. 406-413.

The future of Indian business education - https://www.economist.com/whichmba/future-indian-business-education.

United Nations report (2014). The power of 1.8 billion adolescents, youth and the transformation of the future - http://hdl.handle.net/20.500.11822/18723 accessed on 1st October 2018.

Wheaton, B., Muthen, B., Alwin, D.F. & Summers, G. (1977). Assessing Reliability and Stability in Panel Models, Sociological Methodology, Vol.8, No.1, pp 84-136.