

* uses a language of variables and

THURSDAY • JANUARY

2020

WK 02 • 009-357

09

What is a variable?

- Variable is the central idea in research.
- Variables are the concepts that varies.
- Quantitative research * tries to find out the relationships among variables.
- Variable is anything which can vary.
- It is anything which can take more than one value. These values or categories of a variable are called attributes.

Eg - Gender (variable)

male (attribute)

female (attribute).

Eg - Marital Status (variable).

married (attribute)

Unmarried (attribute)

- First task in quantitative research is to redefine concepts in the language of variables.

Eg - Height, Weight, Age, Income.

FEBRUARY 2020						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

MARCH 2020						
M	T	W	T	F	S	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

SATURDAY • JANUARY

2020

WK 02 • 011-355

11

Types of variables

9.00 • Variables can be of 3 Types depending on their location in causal relationship.

10.00 • The cause variable is the independent variable. The effect variable is the dependent variable. (a)

11.00 (b) Independent variables come before other types of variables and have an impact on other variables. Research topics are often phrased in terms of dependent variables because dependent variables are the phenomenon to be explained.

12.00 3.00 Eg →

Drug addiction → No Job → Poverty

DA (inde) → NJ (Dep) → P (Dep)

DA (an independent variable) leads to Joblessness (a dependent variable) because whether a person has job or not depends on drug addiction. 12

Again poverty (a dependent variable) is so because it is dependent on whether a person has job or not.

M	T	W	T	F	S	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

13

2020

013-353 • WK 03

NJ (Inde) → Poverty (Dep)

9.00 No job or joblessness can act as an independent variable which leads to poverty (a dependent variable).

11.00 Hence we see that 'No Job' acts both as a dependent and as an independent variable. Hence, it is also called an intervening variable. (c)

2.00 Intervening variables appear in more complex causal relations.

3.00 It comes in between the ~~depend~~ independent and dependent variable and shows the link or mechanism between them. In a sense, the intervening variable acts as a dependent variable with respect to an independent variable; and acts as an independent variable for the dependent variable.

Simple theories have one independent and one dependent variable. Whereas, complex theories can contain dozens of

FEBRUARY 2020

M	T	W	T	F	S	S
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

MARCH 2020

M	T	W	T	F	S	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

TUESDAY • JANUARY

2020

14

WK 03 • 014-352

variables, with multiple independent, intervening and dependent variables.

2 major types of variables → DV, IV

• Dependent Variable is the variable a researcher is interested in.

• Independent Variable is the variable that is believed to affect the dependent variable.

One manipulates an independent variable to see what happens to the dependent variable.

Independent variable influences change in the dependent variable.

Independent variable is 'independent of' prior causes that act on it, whereas the dependent variable depends on the cause.

Independent Variable

Manipulator

Cause

Influencer

Dependent Variable

Result

Effect

Outcome

JANUARY • WEDNESDAY

15

2020

015-351 • WK 03

For example -

Income (independent variable)
Savings (dependent variable).

Changes (Increase or decrease) in the
income will lead to resultant changes
in savings.

Hence savings (dependent variable)
depends on income (independent
variable).

DECEMBER 2019

M	T	W	T	F	S	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

JANUARY 2020

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		