

Effect of Blood Type on Motivation Process, Theories, and Behaviours

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ABSTRACT

Purpose: *Blood is the most fundamental nourishment for our bodies. It seems to be that different blood types would react differently & motivate differently. Many other factors also influence our personality in the same way as motivation. Maybe blood type should be used for more than just matching organ donors, the same way may be blood type could also be good for watching the motivation process, theories & behaviours of people. Thus, the purpose of the study is to identify the effect of blood type on motivation process, theories & behaviours.*

Objective: *The researchers have set the following primary objective and the current study investigates 1 broad research question: To identify the effect of blood type on motivation process, theories & behaviours.*

Design/Methodology/Approach: *A descriptive study was undertaken with the involvement of 128 respondents of various professionals. Respondents were given a validated close-ended structured questionnaire on Likert's 5-point scale. The options chosen were scored & complied resulting data was analyzed statistically by ANOVA using SPSS (21.0) software.*

Findings/Result: *Previously nobody studied blood group & motivation. The researchers in the study have observed that blood type has no statistical significance with motivation, behaviours and personality. Considering the strong belief in many countries where blood type is having significant association with the term motivation and it was strongly proved. Hence the major observation in the study is individuals have changed their personality, and motivation factors to be connected with the blood type rather than in a self-fulfilling prophecy. Thus, the blood group does not have any statistical significance with the motivational process, theories & behaviours of people.*

Research Limitations/Implications: *Motivational behaviours are to be in the flow by considering the major factors that are in trend and it is considered as the primary weapon in understanding the motivational functions i.e., individuals have in thoughts other than monetary benefits to be availed for which the blood type and their relationship with motivation process, theories & behaviours helps a lot.*

Originality/Value: *Many of the earlier studies have proved that the blood group of individuals does not have any statistical significance with the motivational factors and also personality and behaviours. But, some of the studies in Japan, Korea, Asia, etc. have proved that blood groups do have an effect on the motivation process, theories & behaviours as these countries do believe in the theories of personality and other motivational aspects. Hence, this study helps in concluding that, individuals tend to change their personality, and motivation factors to be connected with the blood type rather than in self-fulfilling prophecy, wherein, this has led to the emergence of following astrological signs like individuals in Japan.*

Paper Type: *This study is a significant attempt to identify the effect of blood type on the motivation process, theories & behaviours help a lot. The study is based on primary evidence.*

Keywords: Blood type, Motivation process, Motivation theories, Motivational behaviours, Content motivation, Process motivation, Reinforcement, Extrinsic & Intrinsic

1. INTRODUCTION :

Blood factors are one of the important medical and biological causes in the etiology of motivational behaviours [1]. Nobody knows blood type and motivational behaviours are strongly associated with the factors [2]. The above claim is not significantly proven in any of the earlier studies, but significantly over a period of time, it is understood that it is an accepted statement in terms of culture and societal aspects as understood by the individuals in Japan [3]-[4]. The major understanding and belief of Japanese are that identified blood group of individuals have a significant relationship with the personality traits of individuals is most commonly understood among the group [5] and they are widely spread across and even it is considered in the job interview process and proven to be fit [6]. In the same way, the researchers have taken an attempt to find out the blood group influence the motivation of individual along with their personality and behaviour rather than considering only organ donors [7]-[8]. The significance of the study is to determine the effect of the blood group on the motivation process, theories & behaviours.

2. REVIEW OF LITERATURE :

There are certain characteristics of blood groups: Blood groups are O, A, B, & AB [9]:

O Type Blood Group: This group of blood is significantly said to be having higher percentage with more than 35% and said to be an independent type of blood group and these are called leaders in their personality along with being daring and self-reliant individuals [10]. One of the major blood group 'O' is assumed as the original type since it is distributed commonly across all areas and among humans across the world; this is a primary reason for considering the human beings with type 'O' blood as universal donors and also many other types of blood groups are derived from the same [11]. An individual with this blood group is more connected to the personality traits of an individual being aggressive as they are considered as a predator at the top of the food chain [12] and they are most flexible in nature and said to be attractive and more confident in nature with less of stress being imparted on them as they are strict on their regular physical activities [13].

A Type Blood Group: This group is said to be the popular one, wherein, these individuals are more sensitive and understandable in nature [14] as they are cooperative and perfectionist in their behaviour and in their way of thinking smart. Group 'A' individuals are more commonly associated with their personality traits and they are well connected among the farmers [15] and also being more cooperative in crowded communities [16]. The blood group individuals are also seen with characteristics like being tense, shy, sometimes impatient and withdrawn from certain situations as these are more responsible individuals [17].

B Type Blood Group: Third in life in the population count B is a more balanced blood type. They are considered to be the most practical of the type. They can be thoughtful & sensitive but also ambitious with some leadership qualities. They are focused & goal-oriented even in the face of something impossible [18]. They want to know all the details & directions of the process before they jump in. They are individualistic & like to follow their own rules [19]. They can also come cold & serious because they focused more on their thoughts than more than their feelings [20].

AB Type Blood Group: The blood group 'AB' is considered as the hybrid of group 'A' and group 'B' and they follow a diet which is in between those groups 'A' and 'B' or are considered to be following the things separately. Wherein, these are not much popular individuals and are very much rare in their availability. They are active & spiritual & their lives tend to be full of excitement. The group 'AB' is still considered to be one of the rarest blood groups among individuals [21], wherein, these are blessed with certain presumed abilities as they follow optimal diets and like to process a wide variety, such that, they are considered to be individuals with more general flexibility and ready for a wide variety of situations and challenges [22].

3. GAPS & AGENDA FOR FUTURE RESEARCH :

The review of the studies reveals that many of the earlier studies have concentrated only on the motivational aspect and strategies of motivation in general. It is identified that the studies which have concentrated on the general aspect are very few in nature and they are in the form of reports and articles, wherein, they lack in their orientation of research. Such that, there is significance and more needed for conducting the research on general aspects of blood group and its significance on the key parameters like behaviour, theories and motivational process with proper orientation.

4. OBJECTIVE OF THE STUDY :

The researchers have set the following primary objective and the current study investigates 1 broad research question:

(1) To identify the effect of blood type on motivation process, theories & behaviours.

5. RESEARCH METHODOLOGY :

This study is a significant attempt to identify the effect of the blood group and its significance on the motivation process, theories & behaviors. The study is based on primary evidence. In this regard involvement of 32 respondents from each blood type & a total of 128 respondents of various professionals were chosen & respondents were given a validated close-ended structured questionnaire of Likert's 5-point scale.

6. SAMPLE DESIGN :

The table 1 explains the sample design of the study.

Table 1: Sample Design	
Type of Research	Descriptive
Sample Universe	Karnataka
Sample Area	Tier 1, Tier 2 & Tier 3 cities
Sample Population	<p>The selected blood type of professionals/occupations</p> <ul style="list-style-type: none">• Health care & medicine• Education & training• Science, technology & engineering• Law enforcement & armed forces• Banking• Industrial & manufacturing• Arts & entertainment• Sports• Hospitality & tourism• Business/entrepreneurs• Government & public administration• Farmers: agriculture & livestock's• Students
Sample Frame	<ul style="list-style-type: none">• Doctors: Government & private

	<ul style="list-style-type: none"> • Teachers: Government & private (primary to all) • Engineers: Government & private IT & BT professionals (CS, IS, ME, CV, EC, etc) • Lawyers: Government & private • Armed forces (police, military) • Bank & accountants • Manufacturing: Small medium & large scale • Sports: Selected sports • Artist: Actors, models, designers, dancers, singers, art & craft • Tourism • Business people: Trade, hotels, management executives • Govt. & public administration others: Forestry & fishery • Farmers • Students
Sample Unit	Working professionals & students
Sample Size	32*4 = 128
Sample Techniques	Convenient random sample
Instrument	Likert 5-point scale
Type of Questionnaire	Close-ended structured questionnaire
Statistical Tools	One way ANOVA
Sampling Data	Primary & secondary data
Variables Selected	Independent variable: Blood type
	Dependent variable: Motivation process, theories & behaviours

7. HYPOTHESIS OF THE STUDY :

Based on the objective framed hypothesis are framed to prove or disprove the statement.

Hypothesis 1 (H₀): Blood type does not affect the motivation process.

Hypothesis 2 (H₀): Blood type does not affect motivation theories.

Hypothesis 3 (H₀): Blood type does not affect motivational behaviors.

8. RESULTS, DISCUSSIONS & RESEARCH MODELS :

Epilogues to Prove Effect of Blood Type on Motivation Process, Theories & Behaviours

8.1 Influence of Blood Type Effect on Motivation Process and its Significance on Motivation Theories:

The term motivation of an individual is assumed to be influenced by many internal and external factors that include, environmental, genetic, cultural and situational aspects. Understanding the influence of blood type on motivation is very much significant as it helps to determine the behavior of professionals and their reason for behaving is well fitted in the study and addresses the reason for being in their way and following certain theories and helping to showcase which is best among the available in a particular situation. Further, it is understood that these blood groups will have significance with each

of the theories and they are complementary in understanding the influence of these groups on the behavior of individuals along with the motivation process and being adopted with the theories describe to answer the different questions and chose the particular one which is in need. Hence the groups of theories are; Content motivation theories answer what do employees need to meet on the job? Do Process motivation theories answer how employees choose behavior to fulfill their needs? Reinforcement theory answers on manager's thoughts, to get professionals to behave in ways that meet the organizational objectives?

The research framework is drawn in Figure 1 & explains block diagram of blood type & motivation process. The behavior of individuals along with the motivation process and being adopted with the theories are described below. Results of one way ANOVA across blood type & motivation theories (N=32 each blood type) are shown in the Table 2 & Figure 2 explains effect of blood type on motivation theories.

- **Need:** It is a factor showing the needs that are unmet and individual want that is to be satisfied.
- **Content Motivation Theories:** It is the concept that addresses the various theories of motivation such as; the Hierarchy of Needs Theory, Acquired Needs Theory, and Two-Factor Theory.
- **Motive:** It is a factor considered to identify the behavior of individuals to satisfy their needs.
- **Process Motivation Theories:** It is the concept that addresses the various theories such as; Equity Theory, Goal-Setting Theory, and Expectancy Theory.
- **Behavior:** It addresses the action required by an individual to satisfy the need.
- **Consequence:** It explains the behavior of individual managers and also the natural outcome of their actions.
- **Satisfaction or Dissatisfaction:** The concept helps to understand the level of meeting the needs and availing the wants for a longer duration, if the need and wants are not met then it is considered to be dissatisfaction.

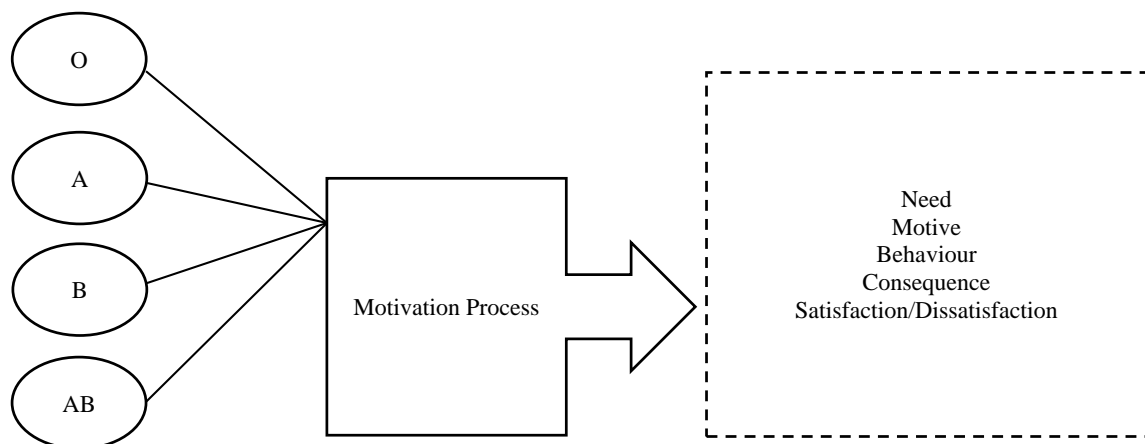


Fig. 1: Block Diagram of Blood Type & Motivation Process

Content Motivation Theories:

- **Hierarchy of Needs Theory:** This theory addresses about the influences of 5 levels of needs such as; physiological, safety, social esteem and self-actualization.

- **Two Factor Theory:** This theory explains the various factors that influence professionals to be motivated than addressing maintenance.
- **Acquired Needs Theory:** This theory helps in addressing the influence of motivational factors such as; achievement, power and affiliation for the professionals.

Process Motivation Theories:

- **Equity Theory:** This theory explains about the impact of perceived inputs and outputs on the motivational level of professionals.
- **Expectancy Theory:** This theory explains about the influence of self-confidence and their level of thinking on accomplishing any task assigned to them and also the influence of rewards on the motivation level of professionals.
- **Goal Setting Theory:** This theory addresses the achievable and also the goals to be accomplished by the professionals.

Reinforcement Theory:

- **Types of Reinforcement:** Positive, Avoidance, Extinction & Punishment.

Table 2: Results of One Way ANOVA across Blood Type & Motivation Theories (N=32 each Blood Type)				
Blood Type		Content Motivation Theory (Unmet or Want to be Satisfied Need)	Process Motivation Theory (Selecting Behaviour to Satisfy Need)	Reinforcement Theory (Manage Behaviour or Natural Outcome of Action)
O	Mean	3.78	3.88	4.09
	SD	0.83	0.94	1.12
	F	2.3	0.55	2.09
	Sig	0.14	0.46	0.15
A	Mean	3.97	3.97	4.47
	SD	0.78	0.69	0.62
	F	3.49	4.57	35.19
	Sig	0.04	0.04	0.01
B	Mean	4.03	3.78	4.59
	SD	0.69	0.55	0.50
	F	3.17	0.47	4.32
	Sig	0.04	0.62	0.02
AB	Mean	4.28	4.75	4.47
	SD	0.46	0.44	0.51
	F	9.23	33.75	154.7
	Sig	0.005	0.001	0.001
Source: Field Survey and Primary Data of Selected Professionals in the Study Area May 2022 Note: F Critical Value is 2.73 @ 5% Significance Level				

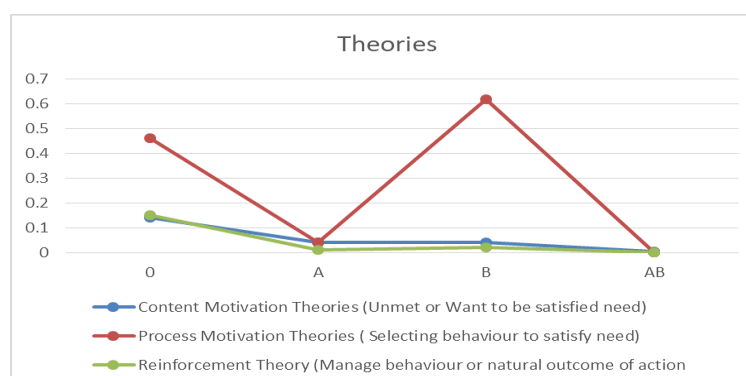


Fig. 2: Effect of Blood Type on Motivation Theories

O Type Blood Group: With reference to the blood type O, the value F 2.3, 0.55 & 2.09 for the theories such as Content Motivation, Process Motivation & Reinforcement is less than the critical value & the p-value is greater than the significance level indicating there is no relationship between blood type O & Motivation Theories. Hence H₀ is accepted.

A Type Blood Group: With reference to the blood type A, the value F 3.49, 4.57 & 35.19 for the theories such as Content Motivation, Process Motivation & Reinforcement is greater than the critical value & the p-value is lesser than the significance level indicating there is a relationship between blood type A & Motivation Theories. Hence H₀ is rejected & H_a is accepted. (Reinforcement Theory: High).

B Type Blood Group: With reference to blood type B, the value F 3.17 & 4.32 & for the theories such as Content Motivation & Reinforcement is greater than the critical value & the p-value is lesser than the significance level indicating there is a relationship between blood type B & Motivation Theories. Hence H₀ is rejected & H_a is accepted. (Reinforcement Theory: High). With reference to blood type B, the value F 0.47 for the theory such as Process Motivation is lesser than the critical value & the p-value is greater than the significance level indicating there is no relationship with respect to blood type B & Process Motivation Theory. Hence H₀ is accepted.

AB Type Blood Group: With reference to the blood type AB, the value F 9.23, 33.75 & 154.7 for the theories such as Content Motivation, Process Motivation & Reinforcement is greater than the critical value & the p-value is lesser than the significance level indicating there is a relationship between blood type AB & Motivation Theories. Hence H₀ is rejected & H_a is accepted. (Reinforcement Theory: High).

Thus, blood type A & AB affect motivation theories such as Content Motivation, Process Motivation & Reinforcement. Whereas blood type B affect motivation theories such as Content Motivation & Reinforcement. But blood type B does not affect motivation theory such as Process Motivation. Whereas blood type O does not affect motivation theories such as Content Motivation, Process Motivation & Reinforcement.

8.2 Effect of Blood Type on Motivational Behaviours: Blood Type can be Extrinsic or Intrinsic Motivational Behaviours:

Extrinsic Motivational Behaviours: Extrinsic motivational behaviours are tangible in nature. These motivational behaviours are external to the job or task performed by the professionals. Extrinsic motivational behaviours are also called financial rewards/monetary. External motivational behaviours can be in terms of salary/pay, incentives, bonuses, fringe benefits, allowances, health & life insurance, promotions, job security, transpiration facility, medical facility, vacation with pay, meal facility, etc. [23]-[24].

Intrinsic Motivational Behaviours: Intrinsic motivational behaviours are intangible in nature. These motivational behaviours are psychological motivations. Intrinsic motivational behaviours are also called non-financial rewards/non-monetary. Intrinsic motivational behaviours like appreciation and recognition, meeting the new challenges, positive and caring attitude from professionals, a healthy working condition which fosters a professional relationship between supervisors & employees, training & development and job rotation after attaining the goals, etc [23]-[24].

The research framework is drawn in Figure 3 & explains block diagram of blood type & motivational behaviours (I.V: Independent Variables & D.V: Dependent Variables). Results of one way ANOVA across blood type & motivational behaviours (N=32 each blood type) are shown in the Table 3 & Figure 4 explains effect of blood type on motivational behaviours.

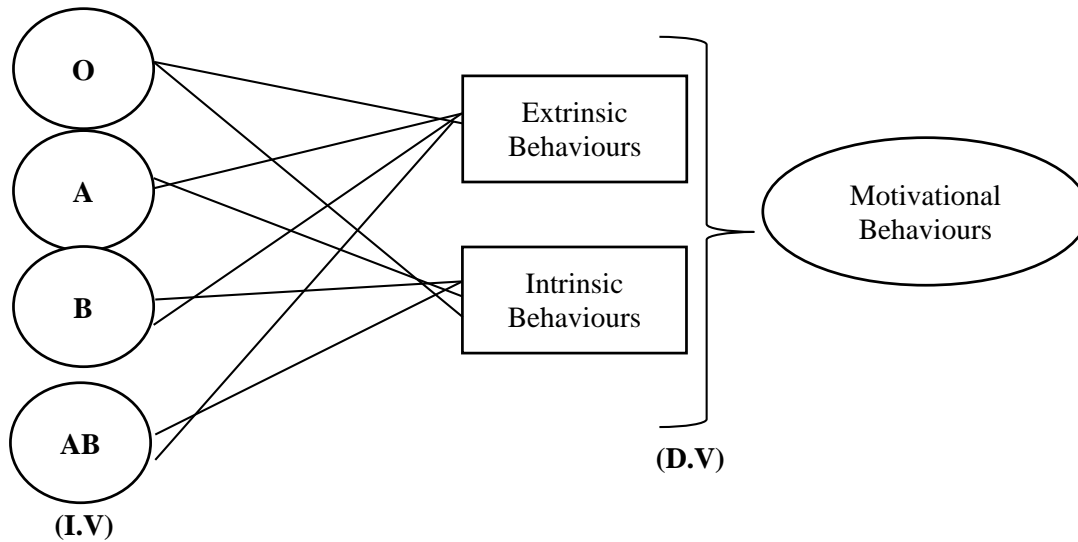


Fig. 3: Block Diagram of Blood Type & Motivational Behaviours
(I.V: Independent Variables & D.V: Dependent Variables)

Table 3: Results of One Way ANOVA across Blood Type & Motivational Behaviours (N=32 each Blood Type)			
Blood Type		Extrinsic/Monetary/Financial Rewards	Intrinsic/Non Monetary/Non Financial Rewards
O	Mean	4.50	3.38
	SD	0.84	1.36
	F	0.17	0.59
	Sig	0.68	0.44
A	Mean	3.91	4.42
	SD	0.93	0.57
	F	1.61	2.11
	Sig	0.21	0.32
B	Mean	4.34	4.22
	SD	1.08	1.11
	F	22.47	1.77
	Sig	0.001	0.43
AB	Mean	4.06	4.19
	SD	0.91	0.74
	F	90.47	84.78
	Sig	0.001	0.001
Source: Field Survey and Primary Data of Selected Professionals in the Study Area May 2022			
Note: F Critical Value is 2.73 @ 5% Significance Level			

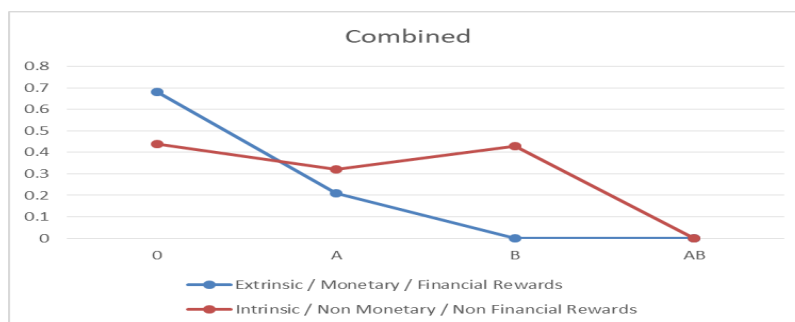


Fig. 4: Effect of Blood Type on Motivational Behaviours

O Type Blood Group: With reference to the blood type O, the value F 0.17 & 0.59 for the motivational behaviours such as Extrinsic & Intrinsic is less than the critical value & the p-value is greater than the significance level indicating there is no relationship between blood type O & motivational behaviours. Hence H₀ is accepted.

A Type Blood Group: With reference to blood type A, the value F 1.61 & 2.11 for the motivational behaviours such as Extrinsic & Intrinsic is less than the critical value & the p-value is greater than the significance level indicating there is no relationship between blood type O & motivational behaviours. Hence H₀ is accepted.

B Type Blood Group: With reference to blood type B, the value F 22.4 for motivational behaviour such as Extrinsic is greater than the critical value & the p-value is lesser than the significance level indicating there is a relationship between blood type B & motivational behaviour. Hence H₀ is rejected & H_a is accepted. (Extrinsic: High). With reference to blood type B, the value F 1.77 for motivational behaviour such as Intrinsic is lesser than the critical value & the p-value is greater than the significance level indicating there is no relationship between blood type B & motivational behaviour. Hence H₀ is accepted.

AB Type Blood Group: With reference to the blood type AB, the value F 90.47 & 84.78 for motivational behaviour such as Extrinsic & Intrinsic is greater than the critical value & the p-value is lesser than the significance level indicating there is a relationship between blood type AB & motivational behaviours. Hence H₀ is rejected & H_a is accepted. (Extrinsic & Intrinsic: High).

Thus, blood type AB affects motivational behaviours such as Extrinsic & Intrinsic. Whereas blood type B affect motivational behavior only on Extrinsic & not on Intrinsic. Whereas blood type O & A does not affect motivational behaviours such as Extrinsic & Intrinsic.

8. ANALYSIS/IMPLICATIONS & SUGGESTIONS :

The challenge of the effect of blood type on motivation process, theories & behaviours is not peculiar to any place or profession; hence the problem is more accentuated. It is understood that many of employers have learnt that, to maintain the stability of their employees and also to tackle the challenges in HR and overcome the problems faced by them, the employers need to address the motivational behaviours of individual employees and also they tackle the same by using the motivational theories and also the method to satisfy the need of employees and take care of things that are beyond monetary compensation for which the effect of blood type on motivation process, theories & behaviours helps a lot.

9. CONCLUSION :

The present study is attempted to identify the effect of blood type on the motivation process, theories & behaviours. The study is based on primary evidence. With these three epilogues proven we can say that there is an effect of blood type on motivation process, theories & behaviours. Researchers have found that blood type affects the motivation process with the motivation theories. Motivational behaviours are to be in the flow by considering the major factors that are in trend and it is considered as the primary weapon in understanding the motivational functions i.e., individuals have in thoughts other than monetary benefits to be availed for which the blood type and their relationship with motivation process, theories & behaviours helps a lot. Hence, this study helps in concluding that, individuals tend to change their personality, and motivation factors to be connected with their blood type rather than in a self-fulfilling prophecy. Thus, blood type does have a relationship with motivational behaviours like extrinsic & intrinsic also.

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