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IDENTIFICATION OF PROSPECTIVE TEACHERS' CHARACTERISTICS THROUGH PREFERENCES FOR COLORS

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ABSTRACT

The major objective of this study was to link the different characteristics of prospective teachers with their color preferences. This study was quantitative in nature. A self developed questionnaire was used as a research instrument. The validity of the instrument was done through pilot testing and expert opinion. The reliability of the instrument was calculated by using Cronbach alpha which was 0.75. The data were collected from 1469 male and female prospective teachers from two public sector Universities. The collected data were analyzed by using descriptive statistics, using SPSS. The results of the study revealed that most of the respondents preferred black color. The study also showed that those prospective teachers who preferred green, orange, purple, and red colors were identified as confident; those who preferred pink color had maximum fear of unknown; those who preferred black color can diagnose the best; who preferred one of the colors black, white, orange, red, and pink were identified more aggressive. The prospective teachers who preferred green color were identified as good problem solvers.

Key words: color psychology, personality characteristics, prospective teachers

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INTRODUCTION

Investigating the traits of individual's personality has always been a mystery and interesting topic for psychologists and researchers. There are many areas related to the personality traits. One of the research areas in this regard is a color psychology. It is defined as the study of color as a determinant of human behavior (Whitfield & Wiltshire, 2009). Human response to different colors provides basis for personality assessment techniques which have included several tests about the construction of personality (Warner, 2002). A famous psychologist Carl Jung has been associated most famously with color psychology, pioneering its stages. He was interested in the meanings and properties of colors, and in the potential of art to be used like a tool for psychotherapy (Charles, 1995). Many research has been done in past on the association between mood and color preferences covered feminine perspective (Reed, 2012).

According to Whitfield and Wiltshire (2009), there are six principles providing the base for color psychology model. The principles are: particular meaning can be occupied by color, meaning is learned or are innate biologically, the person who perceives evaluation automatically may be causes the color perception, the process of evaluation forces motivated behavior by color, usually color automatically imposes its influence, and finally that the context is also important with the meaning and effect of color. Color is usually taken as a perceptual stimulus that is related to the aesthetic sense of the individual (Park, 2018), but color psychology goes beyond aesthetics and says that there is a link between liking a color and psychological functioning of the individual. In the earlier years of the studies about color psychology, the response to colors was taken as an indicator of emotional aspects of one's personality. A large number of studies in that period supported the above-mentioned idea, but later it was found that other observable and non-observable aspects of one's personality can also be known by the choice of the color. Personality characteristics are usually explored in the individuals by their preferences to different colors. Many color tests and self description techniques are available to test the personality characteristics (Warner, 2002).

Literature supports the role of preferences to color in the identification of the personality characteristics of the individuals. There are similar studies in the world like, Bear (2012), Murray and Deabler (2010), and Buckner (2012). that provide the base for the current study in Pakistan. An individual may have many qualities and characteristics such as confidence, fear of unknown, courage, aggression, anger, problem-solving, communication skills etc.

In the context of education, teachers are one of the most important players (John, 2000). It was interesting to investigate the personality traits of prospective teachers by their preferences for colors. The results of the study may be helpful for the teachers to know the personality characteristics of prospective teachers and they manage and build good relations with them. Similarly, students may understand the personality traits of teachers by their preferences for colors; adjust themselves and learn better in the classroom. Keeping in mind the significance of the topic, main objective of this study was to identify the characteristics of prospective teachers by their preference of color.

Methodology

The study was quantitative in nature. Descriptive research design with the survey method was used to identify the characteristics of prospective teachers. Convenient sampling technique was used to collected large number of data using questionnaire. The questionnaire was based on five point Likert scale i.e. Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (DA), and Strongly Disagree (SDA). It covered eight characteristics i.e. confident, fear of unknown, anger, courage, aggression, problem-solving, and good communication. The instrument was developed by the researchers themselves.

The validity of the instrument was verified through opinion five experts. The CVI Index was calculated i.e. 0.95. Piloting was also done on 30 prospective teachers. The reliability Alpha co-efficient was calculated. Its value was found to be 0.75. The final data were collected from 1469 respondents from two public sector universities. The data were collected through personal visits and with the help of a students team (consisting of six members). They voluntarily collected the data. The collected data were analyzed by using descriptive statistics using frequencies, percentages and Bar graphs.

Findings

In the procedure of responding the questionnaire, firstly the respondents had to select only one color from the list of eight colors: red, green, yellow, white, black, blue, pink, purple, and orange.

Table 1

Number of male and female Respondents with preference of colors

Gender	Color choice									Total
	Black	White	Blue	Green	yellow	orange	purple	Red	pink	
Male	223	103	112	73	23	26	36	31	26	653

	332	100	79	58	28	10	88	39	82	816
Total	555	203	191	131	51	36	124	70	108	1469

Table 1 shows that most of the respondents select black color i.e. 37.8%. The colors: white, blue, green, purple, pink, red, yellow, and orange were selected by 13.8, 13, 8.9, 8.4, 7.4, 4.8, 3.5, and 2.5 percents of the total respondents respectively. The female prospective teachers preferred the black color more than the males. The second and the third most preferred colors by the males were blue and white respectively. Very few males selected yellow, pink, and orange colors. Most of the females also selected black color. Females preferred white, purple, and pink on the second, third, and fourth number respectively. The details are presented in the figure 1.
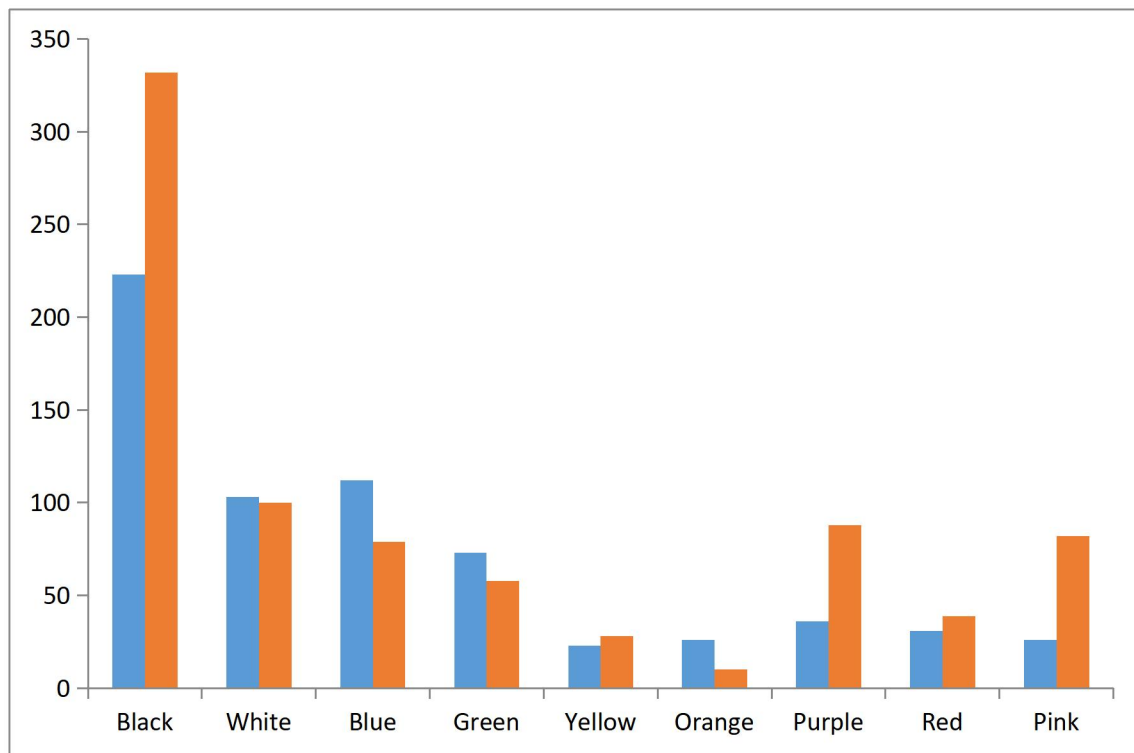
Figure *1:* Gender wise color preferences

Table 2. *Confidence and Color Choice*

Confidence		Color Choice									
		Black	White	Blue	green	yellow	Orange	purple	Red	pink	Total
No	Count	118	43	40	18	13	7	24	13	24	300

		Black	White	Blue	green	yellow	Orange	purple	Red	pink	Total
	% within color choice	21.3	21.2	20.9	13.7	25.5	19.4	19.4	18.6	22.2	20.4
Yes	Count	436	160	151	113	38	29	100	57	84	1168
	% within color choice	78.6	78.8	79.1	86.3	74.5	80.6	80.6	81.4	77.8	79.5
Total	Count	555	203	191	131	51	36	124	70	108	1469

Table 2 shows that most of the prospective teachers i.e. 79.5% were confident in their own opinion. The persons, who preferred black, white, blue, yellow, and pink colors were not confident in their opinion but the people who preferred green, orange, purple, and red colors were confident. Especially the ones who preferred green color were very confident. Details were shown in figure 2.

Table 3. Fear of unknown and color choice

Fear of Unknown		Color Choice									
		Black	White	Blue	green	yellow	Orange	purple	Red	pink	Total
No	Count	333	118	117	83	34	28	72	45	47	877
	% within color choice	60.0	58.1	61.3	63.4	66.7	77.8	58.1	65.2	43.5	59.7
Yes	Count	221	85	74	48	17	8	52	24	61	590
	% within color choice	39.8	41.9	38.7	36.6	33.3	22.2	41.9	34.8	56.5	40.2
Total	Count	555	203	191	131	51	36	124	69	108	1469

Table 3 shows that most of the prospective teachers (59.7%) were of the opinion that they had no fear of unknown i.e. the prospective teachers who preferred black, blue, green, yellow, orange, and red colors, did not have fear of unknown but the ones who preferred white, purple, and pink had fear of unknown. Those who preferred the pink color had the highest level of fear of unknown. Details were shown in figure 2.

Table 4. Diagnose well and color choice

Diagnose well		Color choice									
		black	white	Blue	Green	yellow	orange	purple	red	Pink	Total
No	Count	149	57	49	40	15	8	35	19	32	404
	% within color choice	26.8	28.1	25.7	30.5	29.4	22.2	28.2	27.1	29.6	27.5
Yes	Count	405	146	142	91	36	28	89	51	76	1064
	% within color choice	73.0	71.9	74.3	69.5	70.6	77.8	71.8	72.9	70.4	72.4
Total	Count	555	203	191	131	51	36	124	70	108	1469

Table 4 shows that most of the prospective teachers (72.4%) can diagnose well. The ones who preferred black, blue, orange, and red colors could diagnose well, but the prospective teachers who preferred white, green, yellow, purple, and pink could not diagnose well. The person who preferred black color could diagnose the best. Details are shown in figure 2.

Table 5. Courage and color choice

Courage	Color choice								
	black	White	blue	Green	yellow	orange	purple	Red	pink	Total

		Black	White	blue	Green	yellow	orange	purple	Red	Pink	Total
No	Count	87	36	28	22	7	7	17	7	21	232
	% within color choice	15.7	17.7	14.7	16.8	13.7	19.4	13.7	10.0	19.4	15.8
Yes	Count	468	167	163	109	44	29	107	63	87	1237
	% within color choice	84.3	82.3	85.3	83.2	86.3	80.6	86.3	90.0	80.6	84.2
Total	Count	555	203	191	131	51	36	124	70	108	1469

Table 5 shows that most of the prospective teachers (84.2%) are courageous. Those who preferred black, blue, yellow, purple, and red were more courageous; especially the those who preferred the red color. The prospective teachers who preferred one of the white, green, orange, and pink colors were less courageous. Details are shown in figure 2.

Table 6. *Aggression and color choice*

Aggression		Color choice									
		Black	White	blue	Green	yellow	orange	purple	Red	Pink	Total
No	Count	251	87	88	73	25	14	58	32	48	676
	% within color choice	45.2	42.9	46.1	55.7	49.0	38.9	46.8	45.7	44.4	46.0
Yes	Count	303	116	103	58	26	22	66	38	60	792
	% within color choice	54.6	57.1	53.9	44.3	51.0	61.1	53.2	54.3	55.6	53.9
Total	Count	555	203	191	131	51	36	124	70	108	1469

Table 6 shows that mostly prospective teachers are aggressive i.e. 53.4%. The prospective teachers who preferred one of the colors these colors: black, white, orange, red, and pink were aggressive in nature; especially the prospective teachers who preferred one of the white or black color. The prospective teachers who preferred one of blue, green, yellow, or purple colors did behaved less aggressively. Details are shown in figure 2.

Table 7. Anger and color choice

| Anger | Color choice | | | | | | | | | |
		black	White	blue	green	yellow	orange	purple	Red	pink	Total
No	Count	246	100	93	75	25	19	69	27	57	711
	% within color choice	44.3	49.3	48.7	57.3	49.0	52.8	55.6	38.6	52.8	48.4
Yes	Count	309	103	98	56	26	17	55	43	51	758
	% within color choice	55.7	50.7	51.3	42.7	51.0	47.2	44.4	61.4	47.2	51.6
Total	Count	555	203	191	131	51	36	124	70	108	1469

Table 7 shows that mostly prospective teachers i.e. 51.6%. show anger The prospective teachers who preferred one of black and red colors showed anger especially those prospective teachers who preferred black color. The prospective teachers who preferred white, blue, green, yellow, orange, pink or purple colors mostly showed less anger. Details are shown in figure 2.

Table 8. Problem solving skills and color choice

| Problem solving skills | Color choice | | | | | | | | | |
		black	white	blue	green	yellow	orange	Purple	red	pink	Total
No	Count	158	57	51	19	20	8	25	16	25	379
	% within color choice	28.5	28.1	26.7	14.5	39.2	22.2	20.2	22.9	23.1	25.8
Yes	Count	397	146	140	112	31	28	99	54	83	1090
	% within color choice	71.5	71.9	73.3	85.5	60.8	77.8	79.8	77.1	76.9	74.2
Total	Count	555	203	191	131	51	36	124	70	108	1469

Table 8 shows that mostly prospective teachers are good problem solver i.e. 74.2%. The prospective teachers who preferred green, orange, purple, pink, or red were better problem-solvers especially those who preferred green color. Prospective teachers who

preferred black, white, blue, or yellow colors were not good problem solvers. Details are shown in figure 2.

Table 9. Good communication skills and color choice

Good communication		Color choice									
		Black	white	blue	green	yellow	orange	purple	red	Pink	Total
No	Count	102	39	41	28	18	6	22	19	16	291
	% within color choice	18.4	19.2	21.5	21.4	35.3	16.7	17.7	27.1	14.8	19.8
Yes	Count	453	164	150	103	33	30	102	51	92	1178
	% within color choice	81.6	80.8	78.5	78.6	64.7	83.3	82.3	72.9	85.2	80.2
Total	Count	555	203	191	131	51	36	124	70	108	1469

Table 9 shows that overall prospective teachers i.e. 80.2% have good communication. The prospective teachers who preferred black, white, orange, purple, or pink had good communication; especially the prospective teachers who preferred black color. The prospective teachers who preferred blue, green, yellow, and red did not have good communication skills.
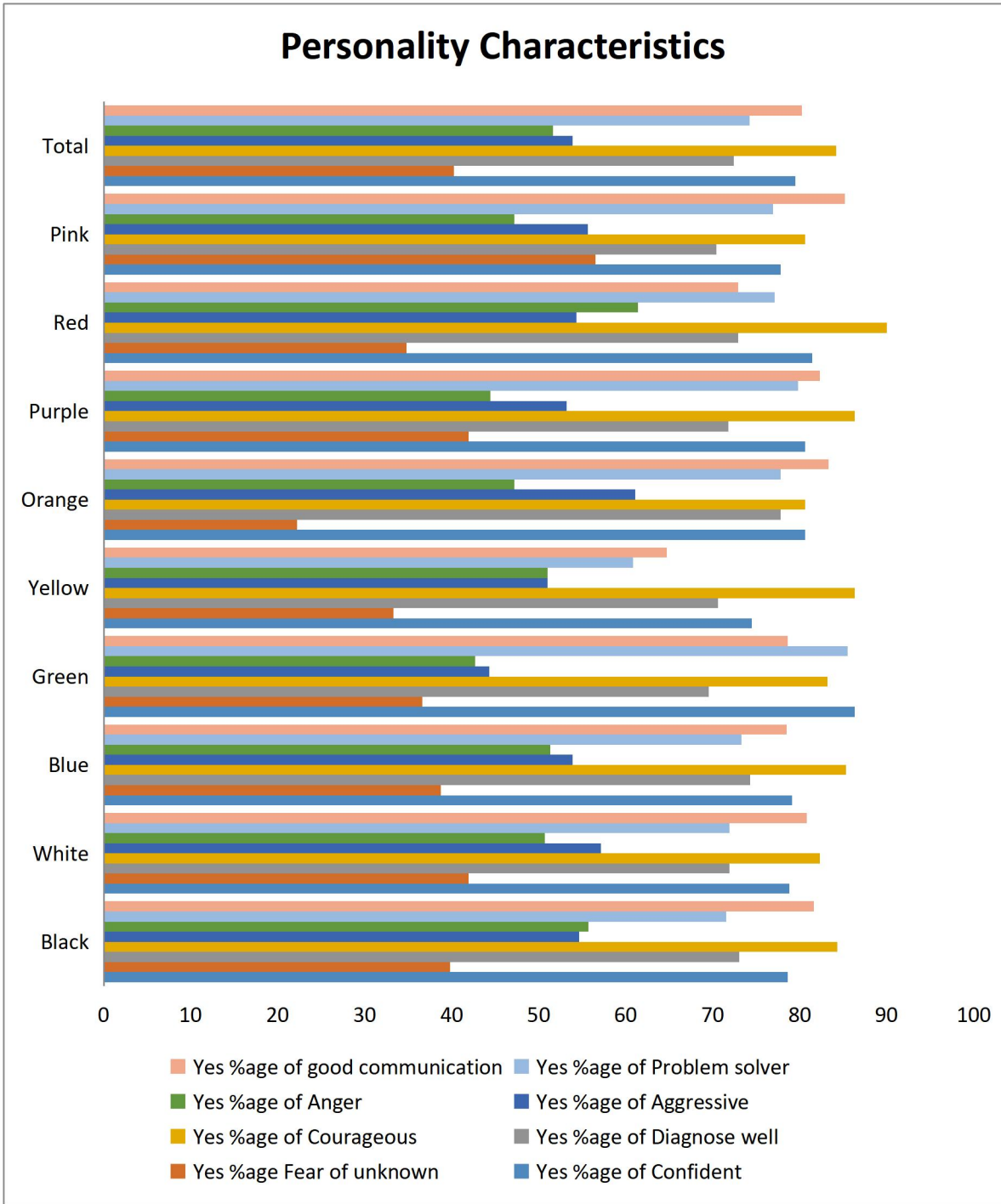
Figure *2:* Personality characteristics of prospective teachers by their color preferences

Limitations of the Research

As it is the case with most of the research in social sciences, it is not claimed that all the above findings are applicable to every individual. There are always exceptions and limitations. We can only predict up to certain extent. There is need to conduct further research using random sampling in this area so that the results might be generalized.

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