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Similarities, differences, favorites and leisure time activities among co-twins and singletons: A comparative study

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Abstract

The study on “Similarities, differences, favorites and leisure time activities among co-twins and singletons: A comparative study” was conducted at Hubli and Dharwad cities of Karnataka. A snow ball sampling method was used for the selection of twins and non-twin siblings/singletons for the study. The sample comprised of 39 twin pairs (monozygotic and dizygotic) and 78 singletons of same family. The respondent's age ranged from 10 to 24 years. General information schedule was used to elicit background information about twins and singletons and also data on common similarities, differences, favorite subjects, favorite sports activities, goals and ambitions, hobbies, leisure time activities, likes and dislikes of foods. The results revealed that, majority of twins and singletons indicated mathematics, science and biology as their favorite subjects and cricket and kabaddi as most favorite team sports. Majority of twins had their ambition as to become engineer and commander whereas singletons indicated their vocational interest as teacher, whereas dancing and playing video game as hobbies. Most of twins and singletons expressed their liking for fast foods and non- vegetarian foods. Watching movie, listening to songs and social network chatting are most common leisure time activities among twins and singletons.

Keywords: Twins, singletons, similarities, differences, favorites, leisure time activities

Introduction

Twins are two offspring's produced by the same pregnancy. Twin births are relatively rare event across the human population. Two types of twins are there: fraternal or dizygotic (DZ) and identical or monozygotic (MZ). The difference between the two types of twins depends on the fertilization of egg after conception. The fertilization of two separate eggs resulting in dizygotic twins and the fertilization of a single egg that later split in two, resulting in monozygotic twins

Growing up as a twin is biologically and psychologically different from growing up as a singleton. Unlike only children or non-twin siblings, twins are together from conception to throughout their life. Compared to social world of singletons, that of twin children is usually characterized by a life- long and constant relationship with a same aged sibling (Stewart, 2000) [3].

Twin relationship is a unique phenomenon that has a profound impact on the upbringing and development of the twin children. Being born together and sharing the same milestones throughout life is not something that most of us singletons will ever truly relate to. Twins are likely to behave like best friends. Twins do indeed share something special. It seems that there is even varying degrees of closeness depending on the type of twin pair. Identical twin girls appear to have the strongest bond than the fraternal boy/girl. This makes sense as twins; tend to forget the strongest relationship with each other and also twins tend to live longer lives due to the emotional support they get from their co-twin.

Every Person has their own preferences, choices and favorites related food, sports activities, academic subjects, vocational interests etc., similarly everyone has their particular hobbies and different ways of spending leisure time by involving in various activities. Whereas in case of twins, these likes and dislikes, choices, preferences, favorites, leisure time activities etc., may be influenced by genetics, sharing home and school environment, inter dependency on co-twin. Hence the present study aimed to find out at what kind of favorites, leisure time activities, Similarities, differences are observed in co-twins and singletons/non-twin siblings.

Methodology

The study was carried out in from Hubli and Dharwad cities of Karnataka.

A snow ball sampling method was used for the selection of twins and non-twin siblings/singletons for the study. The sample comprised of 39 twin pairs (monozygotic and dizygotic) and 78 singletons of same family. The respondent's age ranged from 10 to 24 years. Unmarried twins and singletons were selected for assessing Similarities, differences favorites, leisure time activities.

A general information schedule was used to elicit background information about twins and singletons like age, gender, ordinal position, education, how many years they stayed together, how many years they studied together, common similarities, differences, favorite subjects, favorite sports activities, goals and ambitions, hobbies, leisure time activities, likes and dislikes of foods. The schedule was structured and modified based on the suggestions of experts.

Zygosity was assessed based on the physical similarities like height, weight, skin color, hair color etc.

Descriptive statistics was used (frequency and percentage) to calculated and to interpret the data obtained from co-twins and non-twin siblings.

Results

The personal characteristics of the twins and singletons included gender, age, ordinal position and education are presented in Table 1.

Among monozygotic twins 56.25 percent were females and 43.75 percent were males. Among dizygotic twins 56.52 percent were males and 43.48 percent were females. Among singletons 61.54 percent were females and 38.46 percent were males. Totally 55.13 percent were females and 44.87 were males in the study.

With respect to age, among monozygotic twins, 43.75 percent of them belonged to adolescents (13-18 years) group and 31.25 percent were belonged to young adulthood (19-24 years) group and 25 percent belonged to late childhood (10-12

years) group. Among dizygotic, 52.18 percent of them belonged to adolescents group followed by 30.43 percent were in late childhood and 17.39 percent were in young adulthood group. Among singletons, 47.43 percent of them belonged to adolescents group followed by 32.05 percent to late childhood and 20.51 percent to young adulthood. Totally 48.09 percent, 30.12 percent and 21.79 percent were belonged to adolescents, late childhood and young adulthood group respectively.

With regard to ordinal position, 81.25 percent are later borns and 18.75 percent were first borns among monozygotic twins. And 78.27 percent were later borns and 21.73 percent are first borns among dizygotic twins. There were 62.82 percent were later borns and 37.17 percent were first borns in singletons. Similar trend was observed,

71.16 percent were found later borns while 28.84 percent were found first borns in case of ordinal position.

In case of respondent's education, 56.25 percent of monozygotic twins were completed their high school level of education, followed by 25 percent were graduated, 12.5 percent of them had below graduation education level and 6.25 percent were possessed professional degree. Among dizygotic twins, 56.52 percent of them completed high school level of education, followed by 26.09 percent of them were had below graduation level, 13.04 percent and 4.35 percent of them had degree and professional qualification respectively. Among singletons, majority of them were (56.43%) completed high school level of education, followed by 23.08 percent were completed PUC, 16.65 percent were graduated and 3.84 percent of them were completed their professional degree. In total sample majority (56.42%) of respondents were completed their high school level of education followed by 21.79 percent were in below graduation, 17.31 percent were graduated and only 4.48 percent of them were professionally qualified.

Table 1: General information of respondents

Sl. No.	Characteristics	Twins (n = 78)		Singletons (N = 78)	Total (N = 156)
		Monozygotic (N = 32)	Dizygotic (N = 46)		
1	Gender				
	Male	14 (43.75)	26 (56.52)	30 (38.46)	70 (44.87)
	Female	18 (56.25)	20 (43.48)	48 (61.54)	86 (55.13)
2	Age (Years)				
	Late childhood (10-12 yrs)	8 (25.00)	14 (30.43)	25 (32.05)	47 (30.12)
	Adolescents (13-18 yrs)	14 (43.75)	24 (52.18)	37 (47.43)	75 (48.09)
	Young adulthood (19-24 yrs)	10 (31.25)	8 (17.39)	16 (20.51)	34 (21.79)
3	Ordinal position				
	First born	6 (18.75)	10 (21.73)	29 (37.17)	45 (28.84)
	Later born	26 (81.25)	36 (78.27)	49 (62.82)	111 (71.16)
4	Education				
	Professional qualification of with technical degrees or diplomas	2 (6.25)	2 (4.35)	3 (3.84)	7 (4.48)
	Graduation (B.A, B.com, B.Sc.)	8 (25.00)	6 (13.04)	13 (16.65)	27 (17.31)
	10 th class pass but < graduation	4 (12.50)	12 (26.09)	18 (23.08)	34 (21.79)
	Primary pass but < 10th	18 (56.25)	26 (56.52)	44 (56.43)	88 (56.42)

Figure in parenthesis indicate percentage

Favorites and leisure time activities of twins and non-twin siblings

The result of Table 2 illustrates the favorites and leisure time activities of twins and singletons. With regard to curricular subjects, majority of the monozygotic twins indicated mathematics (81.25 to 87.25%), science (68.75 to 75%) and biology (50 to 62.50%) as their favorite subjects. And very

few of them (12.50 to 37.50%) indicated Kannada, English, social science, physics and history as their favorite subjects.

Among dizygotic twins also, most of them were indicated as indicated mathematics (73.91 to 86.95%), science (60.86 to 69.56%). 34.78 to 43.47 percent of them like social science and very few of them (17.39 to 43.47) indicated as Kannada, English, physics and history as their favorite subjects. The

same trend has been observed among singletons.

While considering the favorite sports activities, cricket and kabbaddi is a most favorite team activity among twins (14.86 to 62.50 and 50 to 73.91% respectively) and singletons (46.15 to 58.97% and 61.53 to 79.48% respectively). Other sports like kho-kho, volleyball and football was expressed as favorite in very few respondents (5.12 to 43.47%).

With respect to vocational interest, most of the monozygotic (18.50 to 25%) and dizygotic twins (17.39 to 37.50%) had their ambition as to become engineer. and 12.50 to 21.73 percent of them expresses as teacher, doctor and police as there ambition. However, in case of singletons, most of them want become as teacher (43.58 to 51.28 %) in their future. Whereas 2.56 to 20.51 percent of them had doctor, engineer and commander and police as their ambition.

With regard to hobbies, in case of both twins and singletons

majority of them (56.25 to 75% and 35 to 48% respectively) were had dancing as their hobby. Majority of monozygotic and dizygotic (68.75 to 81.25% and 65.21 to 73.91% respectively) indicated playing video games as their hobby. Same trend was observed among singletons also. Other hobbies like painting, reading novels and singing were observed in very cases (8.69 to 39.13) in all the respondents.

With respect to food likings, fast food is major food which has liked by most of the twins (73.26 to 87.50%) and singletons (48.71 to 58.97%) followed by 43.75 to 86.60 percent of twins and 53.84 to 61.53 percent of singletons were like to eat non- vegetarian foods. Both monozygotic and dizygotic twins almost equally (56.52 to 75%) like sweets as compare to 20.51 to 38.46 percent of singletons who like to consume sweets.

Table 2: Favorites of twins and singletons

Sl. No.	Particulars	Monozygotic twins (n = 32)		Dizygotic twins (n = 46)		Singleton siblings (n = 78)	
		Twin 1	Twin 2	Twin 1	Twin 2	Sibling 1	Sibling 2
1	Curriculum subjects						
	Mathematics	14 (87.50)	13 (81.25)	20 (86.95)	17 (73.91)	31 (79.48)	27 (69.23)
	Science	12 (75.00)	11 (68.75)	16 (69.56)	14 (60.86)	21 (53.84)	15 (38.46)
	Biology	10 (62.50)	8 (50.00)	9 (39.13)	6 (26.08)	14 (35.89)	19 (48.19)
	Kannada	5 (31.50)	6 (37.50)	7 (30.43)	4 (17.39)	7 (17.94)	13 (33.33)
	Social science	5 (31.50)	7 (43.75)	10 (43.47)	8 (34.78)	17 (43.58)	22 (56.41)
	English	3 (18.50)	4 (25.00)	8 (34.78)	6 (26.08)	5 (12.82)	8 (20.51)
	Physics	3 (18.50)	3 (18.50)	6 (37.50)	5 (21.73)	15 (38.46)	9 (23.07)
	History	2 (12.50)	2 (12.50)	4 (25.00)	5 (21.73)	11 (28.20)	14 (35.89)
4	Team sports						
	Cricket	10 (62.50)	12 (75.00)	11 (47.82)	14 (14.86)	18 (46.15)	23 (58.97)
	Kabbaddi	8 (50.00)	9 (56.25)	15 (65.21)	17 (73.91)	24 (61.53)	31 (79.48)
	Kho kho	3 (18.50)	3 (18.50)	6 (26.08)	10 (43.47)	2 (5.10)	4 (10.25)
	Volleyball	5 (31.25)	3 (18.50)	5 (21.73)	3 (13.04)	7 (17.94)	5 (12.82)
	Foot ball	3 (18.50)	2 (12.50)	7 (30.43)	4 (17.39)	2 (5.12)	1 (2.56)
2	Vocational interests						
	Engineer	3 (18.50)	4 (25.00)	6 (37.50)	4 (17.39)	6 (15.38)	8 (20.51)
	Commander	3 (18.50)	3 (18.50)	2 (8.69)	3 (13.04)	5 (12.82)	2 (5.12)
	Teacher	2 (12.50)	1 (6.25)	3 (13.04)	1 (4.34)	20 (51.28)	17 (43.58)
	Doctor	2 (12.50)	2 (12.50)	5 (21.73)	3 (13.04)	3 (7.69)	1 (2.56)
	Police	2 (12.50)	1 (6.25)	2 (8.69)	5 (21.73)	4 (10.25)	6 (15.38)
3	Hobbies						
	Dancing	12 (75.00)	9 (56.25)	17 (73.91)	13 (56.52)	14 (35.89)	19 (48.19)
	Playing video games	11 (68.75)	13 (81.25)	17 (73.91)	15 (65.21)	24 (61.53)	29 (74.35)
	Painting and Drawing	3 (18.50)	5 (31.25)	9 (39.13)	4 (17.39)	8 (20.51)	13 (33.33)
	Reading novels/stories/books	5 (31.25)	4 (25.00)	2 (8.69)	2 (8.69)	7 (17.94)	3 (7.69)
	Singing	1 (6.25)	1 (6.25)	5 (21.73)	2 (8.69)	6 (15.38)	2 (5.12)
6	Food likes						
	Non-veg recipes	7 (43.75)	7 (43.75)	14 (86.60)	17 (73.91)	24 (61.53)	21 (53.84)
	Fast foods	14 (87.50)	13 (81.25)	20 (86.95)	18 (73.26)	19 (48.71)	23 (58.97)
	Sweets	12 (75.00)	10 (62.50)	16 (69.56)	13 (56.52)	8 (20.51)	15 (38.46)

Figure in parenthesis indicates percentages.

With of regard to activities of during leisure time watching movie and listening songs was observed as common leisure activities among both twins (87.50 to 95.65% and 65.50 to 81.25% respectively) and singletons (71.79 to 76.92% and 64.10 to 66.65% respectively). Social network chatting and

attending summer camps were also observed as major leisure activities among both twins (14.26 to 82.60% and 50 to 95.60% respectively) and singletons (74.35 to 84.61% and 41.02 to 56.41% respectively). Cooking and gardening are the very rare leisure time activities (Table 3).

Table 3: Leisure time activities of twins and singletons

Sl. No.	Particulars	Monozygotic twins (n = 32)		Dizygotic twins (n = 46)		Singleton siblings (n = 78)	
		Twin 1	Twin 2	Twin 1	Twin 2	Sibling 1	Sibling 2
1	Watching movie	14 (87.50)	15 (93.75)	21 (91.30)	22 (95.65)	28 (71.79)	30 (76.92)
2	Listening songs	13 (81.25)	11 (68.75)	17 (73.91)	15 (65.21)	26 (66.65)	25 (64.10)
3	Social network chatting	8 (50.00)	12 (75.00)	22 (95.65)	18 (73.26)	29 (74.35)	33 (84.61)
4	Summer camps	8 (50.00)	9 (56.25)	14 (14.86)	19 (82.60)	16 (41.02)	22 (56.41)

5	Cooking	2 (12.50)	2 (12.50)	3 (13.04)	1 (4.34)	7 (17.94)	4 (10.25)
6	Gardening	1 (6.25)	2 (12.50)	1 (4.34)	1 (4.34)	5 (12.82)	9 (23.07)

Figure in parenthesis indicates percentages.

Co-twin similarities and differences

The researcher has observed some of the specific similarities and differences during the study period among twins.

With regard to specific similarities one of the twin pair has same voice and talking style. Another pair indicated that, they always want sit in same bench and always want to play in same team while participating in group activities and sports. Another pair reported that, the both twins like English language hence they more interested to read English novels, stories and books. On the other hand, they use to converse themselves in English language rather than mother tongue.

With regard to specific differences, among one of the monozygotic twin pair, one twin was right handed another his co twin was left handed. It was interesting to note that, one of non- identical twin had extra toe for his both legs but other one not. In another pair one twin had slight eye problem and hearing problem, he using spectacles, but his co-twin has normal eye sight and hearing ability. One of other interesting difference that was observed in twin pair as reported by parents that one twin possess decent behavior nature and his co-twin has aggressive and bossy nature.

Discussion

Results revealed that majority of twins and singletons (39.13 to 87.50%) and singletons (35.89 to 79.48%) expressed that mathematics, science and biology as their favorite subjects (Table 2). It might be due to that science related subjects are logical, not boring and enjoyable. Usually boys like to solve more mathematical problems and they express it as favorite subject. Majority male twins (52%) expressed mathematics as favorite subject.

With regard to team sports most of the respondents indicated that cricket and kabbadi as their favorite sports. It might be due to popularity of these sports and influence of mass media in present generation.

With regard to vocational interests, among the twins majority of them (17-37%) want to become engineer in their future. It may be due the development in information and technology aspects. However, in case of singletons, majority of them (43.58 and 51.28%) want to become teacher. It may be because among the singletons sample majority of them were females. Generally females think that teaching is the best suitable job. Hence they may like to become teacher.

With regard to hobbies majority of twins (56.25 to 81.25%) and singletons (35.89 to 74.35%) were expressed dancing and playing video games as their hobbies. Dancing and playing video games, both are entertainment activities, which help to get refreshment. As compared to twins, singletons more like to do painting and drawings may because more number of females respondents in the singletons group.

With respect to food likes, majority of the twins (73.26 to 87.50%) as well as singletons (48.71 to 58.97%) like to eat fast foods like pizza, ice cream, panipuri, belpuri, chocolates etc. because now day's many people following western country food habits, especially youths and adolescents. The respondents in the study are below 24 years of age and they like fast foods. Mass media advertisements and increase in working mother population also influence them to eat fast foods. The respondents also like to eat non- vegetarian foods it may be due to their customs and traditional follow- ups.

Many of twins and singletons, that is 25 to 48 percent of the respondents expressed that curd should not be consumed together similarly, 18 to 27 percent of them expressed that after drinking tea avoid water consumption. Around 12 to 15 percent of them also expressed that fish should not consumed with curd. Such food fads were observed more among dizygotic twins than monozygotic twins and singletons.

With regard to leisure time activities, majority of twins and singletons expressed as watching movie, listening songs and social network chatting as their leisure time activities (Table 3). It may be because of development in information technology. At present almost adolescents and youths possess smart phones and through which they can perform multiple tasks. Now a day's government is providing free Wi-Fi facilities at public places. Hence most of youths involved in using social network like Facebook, e-mail, WhatsApp etc. and in websites also they can watch movies and listen to songs. In this globalization world preference is given to online shopping by younger generation. Ahn (2011) ^[2] reported that playing video games, watching offline videos and using messages are private settings, helps to interact with others and it's an easy communication way.

Conclusion

Majority of twins and singletons indicated mathematics, science and biology as their favorite subjects and cricket and kabbadi as most favorite team sports. Majority of twins had their ambition as to become engineer and commander whereas singletons indicated their vocational interest as teacher, whereas dancing and playing video game as hobbies. Most of twins and singletons expressed their liking for fast foods and non-vegetarian foods. Watching movie, listening to songs and social network chatting are most common leisure time activities among twins and singletons.

References

1. Agarwal BL. Basic Statistics. New International Publishers, New Delhi 2006, 51-65.
2. Ahn D. The effect of social network sites on adolescents social and academic development; current theories and controversies. J American Soc. Info. Sci. Technol 2011;62(8):1435-1445.
3. Stewart EA. Towards the social analysis of twin-ship. British J Soc 2000;51:719-737.