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Emotional, cognitive and behavioral differences between children from polygamist and non-polygamist marriages: an explorative study

PHD THESIS ABSTRACT

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Keywords: Polygamy, Monogamy, Polygamous family, Marriage, Bedouin society, Emotional, behavioral, mental and psychological adjustment, Parenting, Adolescents.

Chapter 1: Literature Review

1.1.Polygamy, Cultures and Religions

Anthropologists define polygamy as a marital relationship which involves more than two partners (Low, 1988). In contrast, in a monogamous marriage an individual has merely one spouse at any time (Al-Krenawi & Lightman, 2000). In common speech, the term polygamy is used to define polygyny; the term will be used in this way throughout this paper. Current and up-to-date statistics concerning the prevalence of polygamy on a global level are not available. Polygamous marriage is legally and socially acceptable in 850 societies around the world; this practice is common in the Middle East, Asia, Africa and the Pacific Islands. Although considered unacceptable in most western societies, polygamy is also known to take place in Europe, North America, and other Western societies (Valsiner, 1989; Altman & Ginat, 1996).

Although polygamy is accepted in Islam religion, the Qur'an does not obligate a man to have four wives. Furthermore, the Qur'an imposes that a man must be responsible for the living and the maintenance of his wife or wives:

"Marry woman of your choice in twos' threes' or fours' but if ye fear that ye shall not be able to deal justly, (with them), then only one" [Surah Nisa, Al-Qur'an 4:3]. Having multiple wives is a huge responsibility for males: if a man has multiple wives, he must provide separate living accommodation for each one of them. In addition, a man can marry more than one wife only if he can satisfy his women's needs and treating them justly:

"It is very difficult to be just and fair between women" [Surah Nisa, Al-Qur'an 4:129].

Muslim countries are estimated to have between 2% to 12% a polygamist family, with an average of two wives per husband. And that "the trend in polygamy has varied between different Arab countries; in some, the practice has declined, in others increased, and in yet others has remained relatively unchanged" (p. 57).

Polygamy in Islam was allowed as a result of several considerations:

- Polygamy provided women who were helpless and impoverished with a means of protection and decent livelihood (Barber, 2008).
- Men practiced polygamy to gain an increase in birth rate. This was beneficial both on a larger social scale, as it leads to overall tribal size. On an individual

level, the birth of multiple sons provides polygamous men with extra income, as these sons can help their father with "domestic labor" (Al-Krenawi, Graham, & Izzeldin, 2001).

- Polygamy is considered as a reasonable solution in cases where a wife suffered from a chronic disease, was incapacitated, or unable to give birth to children.
- Regions with high levels of infant mortality benefit from the polygamous family structure (Elbedour et al., 2002).

A man may marry an additional wife if he deems the previous one to be infertile, unable to bear sons, incapable of meeting his sexual needs, or physically or mentally ill. Even if none of the above mentioned conditions exist, a stated desire to bear more sons is considered appropriate (Al-Krenawi, 1998; Al-Krenawi, Graham, & Al-Krenawi, 1997). , although there are some moral and ethical justifications for polygamy, there are still disturbing results for women.

The social structure of Bedouin society. Although the Bedouin is a diverse group, they share the values of "authoritarianism, collectivism, and patriarchy" (Al-Krenawi & Graham, 2006). Bedouin society is based on a four-tribe structure considering the size of each unit, kinship and a patrilineal descent. The largest unit in Bedouin society is that of a confederation or a nation, which is comprised of various tribes grouped together; though each tribe has its private settlement, the connection of the tribes offers a feeling of belonging. A tribe is composed of united families wandering jointly and work the land with the guidance of their leader. In turn, the tribes may contain smaller social groups, such as extended families, or Hamulas, which include several generations with a common ancestor in a patrilineal line. This social structure contributes to the prevalence of polygamy, as marrying more wives increases the chances of having more children (especially sons), thereby increasing the man's esteem and domination (Al-Krenawi, 1998). The social status of a woman is founded based on her marital position and reproductive abilities, particularly male children. Polygamy remains acceptable with sometimes having over four wives, notwithstanding the restriction enforced by the Koran for such number (Al-Krenawi, 1996). Bedouin society in Israel. The phrase "Bedouin," refers to all travelling tribes in the Middle East who speak Arabic. In the past it refers to the scene of men who were riding camels (Kay, 1978). Although there is a connection between Bedouin Arabs of the Negev region and the Bedouin communities around the world, their national, linguistic, political, and geographic group is different. Although most Bedouin living in the Negev region is Muslims, some Christian Bedouins also resides in proximity to this domain. Bedouins are a subclass within the Arab minority in Israel, with a separate cultural, historical, social and political background. Statistics show that the population in 2004 was 130,000 in the Negev and 60,000 in northern and central Israel, which makes up about 3.5% of the Israeli population. The Bedouin population is currently ranked at the lowest level of the Israeli socio- economic ladder (Knesset, 2013). Although there has been some changes within the Bedouin society which made polygamy financially less worthwhile than before, polygamy is still prevalent among the Bedouin youth and even educated people in the Negev. Despite the lack of accurate estimation, it is believed that approximately 20% of all marriages in Bedouin society in the Negev are polygamous. The socio- cultural conception of the Bedouin relates to its size, meaning that greater influence, power and honor is associated with a larger member's number. This explains why polygamy is prevalent in Bedouin societies: multiple wives and the birth of potential male children will raise the members' number in the family entity and thus an increase in their influence and honor (Al-Krenawi, 1998).

A considerable number of studies conclude that family environment has a strong impact on children's mental health. In the last two decades, there has been an increasing interest in the effect polygamy has on the emotional, behavioral, mental and school adjustment of children. Children from polygamous families have been reported to suffer from more mental health, academic, and social hardships than children from monogamous families. Some researchers show that polygamous families provide a greater number of role models and offer greater warmth and affection which have a positive effect on children's general mental health (Elbedour, Bart & Hektner, 2000; Krishnakumar & Buehler, 2000). However, sibling rivalry and conflict is more severe in polygamous families (Al-Krenawi & Lightman, 2000; Elbedour et al., 2000).. However, there is no evident association between polygamy and parent-child conflict (Elbedour, Hektner, Morad, & Abu-Bader, 2003). Reports indicate more severe psychiatric disorders, including hostility, somatization symptoms, obsession, compulsion disorder, interpersonal sensitivity, phobic anxiety, depression, paranoid ideation among children of polygamous families (Al-Krenawi & Slonim-Nevo, 2008). However, there is no significance difference among teens and children from polygamous vs. Monogamous families in any of the psychopathology scales (Hamdan et al., 2009). Several researchers have pointed to the negative emotional effects of polygamy on both co-wives and the children; social issues within the family tend to carry over into the educational system (Low, 1988; Al-Krenawi & Lightman, 2000). Children from polygamous families experience negative self-concept and great difficulties in social adjustment and interpersonal relationships (Lev-Wiesel & Al-Krenawi, 1999).

Chapter 2: Methodology

2.1.Study Aims and Research Method

The main objective of this PhD research is to identify emotional, cognitive and behavioral differences between children living in polygamist families, and children living in non-polygamist families.

More specific, we examined the level of Anxious/Depressed, Withdrawn/Depressed, Somatic complaints, Social Problems, Thought Disturbances, Attention Difficulties, Rule Breaking behavior and aggressive behavior, to evaluate if teenagers living in different type of families (polygamist vs. non-polygamist) are different/similar.

In this work, we use mixed methods, mining both quantitative and qualitative methodologies. These two methodologies enable to interpret polygamy families in a more deep and through the way. There are 468 Israeli Arab children and adolescents in the sample, the mean age of them is 13.80, In the age group of *16-18* there are 58.3% males and 41.70% females. The participants were selected from different geographical zones from Israel, where there is a concentration of polygamist families alongside non-polygamist families [Rahat, Lydia, Nazareth]. The sample selection is done using proportional layers: The population of this study is divided into layers while a sample of each layer in taking based on its proportional size per districts where the population comprised of both polygamist and non-polygamist families.

The research field includes three residential areas in Israel, Rahat in the South district, Lydia in Central Israel and Nazareth in the Galilee [North] in which the population comprises polygamist and non-polygamist families, according to the following sub-division: 20 teenagers [29.0 %], 300 teenagers [64.1%] from The

Bedouin city of Rahat, [South], out of which 27.0% live in polygamist families and 73.0% do not, and 99 teenagers from Lydia [Central Israel] out of which, 19 teenagers live in polygamist families and 79 do not.

To fulfill study's objectives, a mixed method was conducted. The mixed methods approach used a combination of quantitative and qualitative measures not previously used together to examine the variables that influence children of both polygamy and non-polygamy families. The mixed methods research has advantages of both qualitative and quantitative research. Benefits of mixed methods studies include:

- 1. A multidimensional picture of rich numerical and thematic sources.
- 2. A compensating balance between methods
- 3. Well-structured mixed methods research may yield a complex, valid and generalizable description of the reality from separate research designs.

We used quantitative methods to evaluate the associations between variables and also to better identify factors related to emotional, cognitive and behavioral characteristics of children from polygamist and non-polygamist families. Appropriate statistical methods were employed in order to determine the significance of relationships between variables.

In addition, we also used qualitative methods in order to get a wider and deeper understanding of the attitudes and feelings of children in polygamist families. This kind of data could hardly be drawn from the quantitative data. Therefore, we used interviews and focus groups of 5 boys and 5 girls between 8 and 17 years as follows:

- 2 interviews of children between 8 and 10
- 2 interviews of children between 11 and 13
- 2 interviews of children between 12 and 14
- 4 interviews of children between 13 and 17

The research data have been gathered by following questionnaires: Demographic variables, school-age instruments 11-18: "YSR" (The Youth Self Report protocol), From: *ASEBA* (Achenbach System of Empirical Based Assessment)."The Youth Self Report protocol" is a self-administered survey developed originally by Thomas M. Achenbach, and was derived from other widely-used standardized measure in child psychology. The "YSR" was designed to measure the emotional and behavioral

difficulties in adolescents, in a standardized testable format. It is completed by the child or adolescent. It is recommended only for use with children from 11-18 years old.

The research process began by contacting the relevant principals and asking their cooperation, permission to pass the questionnaires to teachers, after reception of responders' full agreement. The questionnaires were distributed to the teachers in school, some by the researcher and some by colleagues. The questionnaires were collected the same way they had been distributed. The consent of passing the questionnaire was given by the parents and the school. All analysis in the thesis is explorative, which involves the fact that they are not driven by hypotheses. In the quantitative approach, we used mean values and standard deviations in order to describe the distributions of variables. Also, in order to quantify the relationship between variables, we used the Pearson correlation (r) which varies from -1 to +1 and indicates the magnitude of the relations. Regarding the comparative analysis, we explored the role of the type of marriage in conjunction with major demographic variables measured. For such analysis, we used the two-way ANOVA model, in which we explored the main effects of the independent variables and also the interaction between them. For qualitative research we used interviews and thematic analysis for extracting the meanings of children's narratives.

Chapter 3: Research Results

3.2. Quantitative results

3.2.1. Effects of type of marriage, gender and the interaction between them

 Table 1. Mean values and standard deviations for anxiety/depression and withdrawn/depression as a function of type of marriage (monogamy/polygamy) and gender (boys/girls)

Measure	Gender	Type of Marriage	Mean	Std. Deviation	N
Anxiety/Depression	Boys	Monogamy	6.30	4.24	163
		Polygamy	6.30	4.21	66
		Total	6.30	4.22	229
	Girls	Monogamy	7.25	4.48	183
		Polygamy	6.89	4.08	55
		Total	7.17	4.39	238
	Total	Monogamy	6.80	4.39	346
		Polygamy	6.57	4.14	121
		Total	6.74	4.32	467
Withdrawn/Depression	Boys	Monogamy	4.36	2.98	163
		Polygamy	5.00	3.31	66
		Total	4.55	3.08	229
	Girls	Monogamy	4.52	2.91	183
		Polygamy	4.71	3.16	55
		Total	4.57	2.96	238
	Total	Monogamy	4.45	2.94	346
		Polygamy	4.87	3.23	121
		Total	4.56	3.02	467

Examination of the data using a two-way ANOVA revealed a non-significant main effect of gender upon Anxiety/Depression (F (1,463) =2.833, p=. 093, η^2 =. 006), a non-significant main effect for Type of marriage (F (1,463) =0.153, p=. 696, η^2 =. 000), and also a non-significant interaction effect between Gender and Type of family (F (1,463) =0.158, p=. 692, η^2 =. 001).

Also, no significant effect upon Withdrawn/Depression was found for Gender (F (1,463) =0.040, p=. 841, η^2 =. 000), and Type of marriage (F (1,463) =1.649, p=. 200, η^2 =. 004), and also a non-significant effect of the interaction between Gender and Type of family (F (1,463) =0.501, p=. 479, η^2 =. 001).

Measure	Gender	Type of Marriage	Mean	Std. Deviation	Ν
Somatic Complaints	Boys	Monogamy	3.25	4.07	157
		Polygamy	2.02	2.88	66
		Total	2.88	3.79	223
	Girls	Monogamy	2.46	2.78	180
		Polygamy	1.57	2.54	54
		Total	2.25	2.74	234
	Total	Monogamy	2.82	3.46	337
		Polygamy	1.82	2.73	120
		Total	2.56	3.31	457
Social Problems	Boys	Monogamy	4.85	3.72	157
		Polygamy	5.15	3.67	66
		Total	4.94	3.70	223
	Girls	Monogamy	4.43	3.54	180
		Polygamy	3.91	3.07	54
		Total	4.31	3.44	234
	Total	Monogamy	4.63	3.63	337
		Polygamy	4.59	3.46	120
		Total	4.62	3.58	457

Table 2. Mean values and standard deviations for Somatic Complaints and Social Problems, as a function of Type of marriage (monogamy/polygamy) and Gender (boys/girls)

Examination of the data showed in table 2 revealed a non-significant effect of Gender upon Somatic Complaints (F (1,453) =3.124, p=. 078, η^2 =. 007). Additionally, a significant effect upon Somatic Complaints was found for Type of marriage (F (1,453) =9.176, p=. 003, η^2 =. 020). That is, children from monogamous families (M=2.82, SD=3.46) suffered somatic problems more than children from polygamous families (M=1.82, SD=2.73). Lastly, the interaction between Gender and Type of

family upon Somatic Complaints was not significant (F (1,453) =0.254, p=. 615, η^2 =. 001).

Figure 1 shows the differences of Somatic Complaints based upon Gender and Type of marriage.



Figure 1. Differences of Somatic Complaints based upon Gender and Type of marriage

Furthermore, a significant effect of Gender was found upon Social Problems (F (1,453) =4.792, p=. 029, η^2 =. 010), as the boys (M=4.94, SD=3.70) suffered social problems more than girls (M=4.31, SD=3.44). Conversely, Type of Marriage had no significant effect upon Social Problems (F (1,453) =0.085, p=. 771, η^2 =. 000), nor the interaction between Gender and Type of Marriage (F (1,453) =1.151, p=. 284, η^2 =. 003). Figure 2. shows the differences of Social Problems based upon Gender and Type of Marriage.



Figure 2. Differences of Social Problems based upon Gender and Type of Marriage

The results of the following concepts - Thinking Problems, Attention Problems, Rules, Breaking and Aggressive Behavior - are presented in tables 3 and 4.

Measure	Gender	Type of Marriage	Mean	Std. Deviation	Ν
Thinking Problems	Boys	Monogamy	8.58	4.99	163
		Polygamy	8.86	5.43	66
		Total	8.66	5.11	229
	Girls	Monogamy	9.18	4.51	183
		Polygamy	7.55	3.92	55
		Total	8.80	4.43	238
	Total	Monogamy	8.90	4.74	346
		Polygamy	8.26	4.83	121
		Total	8.73	4.77	467
Attention Problems	Boys	Monogamy	5.79	3.37	163
		Polygamy	6.38	3.78	66
		Total	5.96	3.49	229
	Girls	Monogamy	6.15	3.28	183
		Polygamy	5.51	3.16	55
		Total	6.00	3.26	238
	Total	Monogamy	5.98	3.33	346
		Polygamy	5.98	3.52	121
		Total	5.98	3.37	467

Table 3. Mean values and standard deviations of Thinking Problems and Attention Problems as a function of Type of Marriage (monogamy/polygamy) and Gender (boys/girls)

The analysis did not yield a significant main effect of Gender upon Thinking Problems (F (1,463) =0.502, p=. 479, η^2 =. 001), or a main effect of Type of Marriage (F (1,463) =1.787, p=. 182, η^2 =. 004). Conversely, a marginally significant effect was found upon Thinking Problems for the interaction between the two factors (F (1,463) =3.632, p=. 057, η^2 =. 008). Further tests revealed that the source of significance was due to a significant effect for girls (t (236) =2.426, p=. 016) but not for boys (t (227) =0.384, p=. 701). That is, there was no significant difference between boys from monogamous families (M=8.58, SD=4.99) comparing to boys from polygamous families (M=8.86, SD=5.43). But differently, girls from monogamous families (M=9.18, SD=4.51) had more thinking problems compared to girls from polygamous families (M=7.55, SD=3.92). Figure 3 shows the differences of Thinking Problems based upon Gender and Type of Marriage.



Figure 3. Differences of Thinking Problems based upon Gender and Type of Marriage.

As for Attention Problems, no significant main effect of gender was found upon this measure (F (1,463) =0.493, p=. 483, η^2 =. 001), nor for Type of Marriage (F (1,463) =0.005, p=. 944, η^2 =. 000). The interaction between Gender and Type of Marriage upon Attention Problems was not significant either (F (1,463) =2.995, p=. 084, η^2 =. 006).

Measure	Gender	Type of Marriage	Mean	Std. Deviation	N
Rules, Breaking	Boys	Monogamy	7.67	4.75	163
		Polygamy	7.73	6.01	66
		Total	7.69	5.13	229
	Girls	Monogamy	5.95	3.75	183
		Polygamy	6.07	4.18	55
		Total	5.97	3.85	238
	Total	Monogamy	6.76	4.33	346
		Polygamy	6.98	5.30	121
		Total	6.82	4.60	467
Aggressive Behavior	Boys	Monogamy	9.09	6.13	163
		Polygamy	8.62	7.15	66
		Total	8.96	6.43	229
	Girls	Monogamy	8.03	5.51	183
		Polygamy	7.25	5.06	55
		Total	7.85	5.41	238
	Total	Monogamy	8.53	5.83	346
		Polygamy	8.00	6.30	121
		Total	8.39	5.95	467

 Table 4. Mean values and standard deviations for Rules, Breaking and Aggressive Behavior

 as a function of Type of Marriage (monogamy/polygamy) and Gender (boys/girls)

A significant main effect of gender was found upon Rules, Breaking (F (1,463) = 12.413, p=. 000, $\eta^2 = .026$), as the level of Rules, Breaking among boys (M=7.69, SD=5.13) was higher than girls (M=5.97, SD=3.85). On the contrary, Type of Marriage had no significant effect upon Rules, Breaking (F (1,463) = 0.035, p=. 852, $\eta^2 = .000$) and neither the interaction between Gender and Type of Marriage (F (1,463) = 0.006, p=. 938, $\eta^2 = .000$). Figure 4. shows the differences in Rules, Breaking based upon Gender and Type of Marriage.



Figure 4. Differences in Rules Breaking based upon Gender and Type of Marriage

As for Aggressive Behavior, a marginally significant effect was found upon this measure for Gender (F (1,463) =3.732, p=. 054, η^2 =. 008), as boys (M=8.96, SD=6.43) showed more aggressive behavior compared to girls (M=7.85, SD=5.41). Conversely, no significant main effect of Type of marriage was found upon Aggressive Behavior (F (1,463) =0.976, p=. 324, η^2 =. 002). The interaction between Gender and Type of Marriage upon Aggressive Behavior was not significant either (F (1,463) =0.058, p=. 810, η^2 =. 000). Figure 5. shows the differences in Aggressive Behavior based upon Gender and Type of Marriage.



Figure 5. Differences in Aggressive Behavior based upon Gender and Type of Marriage.

3.2.2. Effects of type of marriage, age group and the interaction between them

In order to test these effects, we also used the two-way ANOVA in which Type of Marriage (monogamy/polygamy) and Age groups (6-11/12-18) were considered as independent variables. The dependent variables were all the study measures. Tables 5 - 7 show the results.

Table 5. Mean values and standard deviations of Anxiety/Depression and Withdrawn/Depression as a function of Type of Marriage (monogamy/polygamy) and Age group (6-11/12-18)

Measure	Age group	Type of Marriage	Mean	Std. Deviation	Ν
Anxiety/Depression	6-11	Monogamy	6.77	4.37	300
		Polygamy	6.79	4.26	107
		Total	6.77	4.34	407
	12-18	Monogamy	7.04	4.53	46
		Polygamy	4.86	2.57	14
		Total	6.53	4.24	60
	Total	Monogamy	6.80	4.39	346
		Polygamy	6.57	4.14	121
		Total	6.74	4.32	467
Withdrawn/Depression	6-11	Monogamy	4.45	2.87	300
		Polygamy	4.95	3.28	107
		Total	4.58	2.98	407
	12-18	Monogamy	4.46	3.41	46
		Polygamy	4.21	2.89	14
		Total	4.40	3.27	60
	Total	Monogamy	4.45	2.94	346
		Polygamy	4.87	3.23	121
		Total	4.56	3.02	467

Examination of the data showed in table 5 revealed no significant main effect of Age group upon Anxiety/Depression (F (1,463) =1.394, p=. 238, η^2 =. 003), nor for the interaction of Age group and Type of Marriage (F (1,463) =2.479, p=. 116, η^2 =.

005). Likewise, no significant main effect of Age group was found upon Withdrawn/Depression (F (1,463) =0.550, p=. 459, η^2 =. 001), or the interaction of Age group and Type of Marriage (F (1,463) =0.580, p=. 447, η^2 =. 001).

Measure	Age group	Type of Marriage	Mean	Std. Deviation	Ν
Somatic Complaints	6-11	1.00	2.82	3.49	292
		2.00	1.79	2.75	107
		Total	2.55	3.33	399
	12-18	1.00	2.84	3.29	45
		2.00	2.00	2.68	13
		Total	2.66	3.16	58
	Total	1.00	2.82	3.46	337
		2.00	1.82	2.73	120
		Total	2.56	3.31	457
Social Problems	6-11	1.00	4.67	3.58	292
		2.00	4.68	3.55	107
		Total	4.68	3.56	399
	12-18	1.00	4.31	3.98	45
		2.00	3.85	2.51	13
		Total	4.21	3.68	58
	Total	1.00	4.63	3.63	337
		2.00	4.59	3.46	120
		Total	4.62	3.58	457

Table 6. Mean values and standard deviations of Somatic complains and Social problems as a function of Type of Marriage (monogamy/polygamy) and Age group (6-11/12-18)

Examination of the data showed in table 6 revealed no significant main effect of Age group upon Somatic Complaints (F (1,453) =0.043, p=. 836, η^2 =. 000). Additionally, no significant effect upon Somatic Complaints was found in the interaction between Age and Type of Marriage (F (1,453) =0.028, p=. 868, η^2 =. 000).

Regarding Social Problems, no significant main effect of Age group was found (F (1,453) =0.999, p=. 318, η^2 =. 002), and also no significant interaction between Age group and Type of Marriage (F (1,453) =0.155, p=. 694, η^2 =. 000).

The results of the following concepts - Thinking Problems, Attention Problems, Rules, Breaking and Aggressive Behavior - are presented in two tables, 6.1 and 6.2.

Measure	Age group	Type of Marriage	Mean	Std. Deviation	Ν
Thinking Problems	6-11	Monogamy	8.93	4.72	300
		Polygamy	8.36	4.85	107
		Total	8.78	4.75	407
	12-18	Monogamy	8.67	4.96	46
		Polygamy	7.57	4.82	14
		Total	8.42	4.91	60
	Total	Monogamy	8.90	4.74	346
		Polygamy	8.26	4.83	121
		Total	8.73	4.77	467
Attention Problems	6-11	Monogamy	5.94	3.26	300
		Polygamy	5.97	3.60	107
		Total	5.95	3.35	407
	12-18	Monogamy	6.24	3.77	46
		Polygamy	6.07	2.92	14
		Total	6.20	3.56	60
	Total	Monogamy	5.98	3.33	346
		Polygamy	5.98	3.52	121
		Total	5.98	3.37	467
		Total	8.39	5.95	467

Table 7. Mean values and standard deviations of Thinking Problems and Attention ProblemsDifferences as a function of Type of Marriage (monogamy/polygamy) and Age group (6-11/12-18)

Examination of the data showed in tables 7 and 8 revealed a non-significant main effect of Age group upon Thinking Problems (F (1,463) =0.448, p=. 504, η^2 =. 001), and also a non-significant effect of the interaction between Age group and Type of Marriage (F (1,463) =0.115, p=. 734, η^2 =. 000). As for Attention Problems, no significant main effect of Age group was found upon this measure (F (1,463) =0.131,

p=. 717, η^2 =. 000), nor for the interaction between Age and Type of Marriage (F (1,463) =0.033, p=. 856, η^2 =. 000).

Measure	Age group	Type of Marriage	Mean	Std. Deviation	N
Rules, Breaking	6-11	Monogamy	6.73	4.43	300
		Polygamy	7.19	5.40	107
		Total	6.85	4.70	407
	12-18	Monogamy	6.93	3.70	46
		Polygamy	5.36	4.24	14
		Total	6.57	3.85	60
	Total	Monogamy	6.76	4.33	346
		Polygamy	6.98	5.30	121
		Total	6.82	4.60	467
Aggressive Behavior	6-11	Monogamy	8.45	5.75	300
		Polygamy	8.00	6.30	107
		Total	8.33	5.90	407
	12-18	Monogamy	9.07	6.34	46
		Polygamy	8.00	6.50	14
		Total	8.82	6.34	60
	Total	Monogamy	8.53	5.83	346
		Polygamy	8.00	6.30	121
		Total	8.39	5.95	467

Table 8. Mean values and standard deviations for Rules, Breaking and Aggressive Behavior as a function of Type of Marriage (monogamy/polygamy) and Age group (6-11/12-18)

No significant main effect of Age group was found upon Rules, Breaking (F (1,463) =1.183, p=. 277, η^2 =. 003), and also no significant interaction between Age group and Type of Marriage (F (1,463) =1.841, p=. 175, η^2 =. 004). As for Aggressive Behavior, this measure showed no significant main effect of Age group (F (1,463) =0.102, p=. 750, η^2 =. 000), nor for the interaction between Age group and Type of Marriage (F (1,463) =0.102, p=. 750, η^2 =. 000).

3.2.3. Effects of type of marriage, number of siblings and the interaction between them

In order to perform this analysis, we also used a two-way ANOVA in which we treated Type of Marriage (monogamy/polygamy) and Siblings (6 and under vs. 7 and up) as independent variables. The dependent variables were all the study measures. Tables 9 - 11 show the results.

 Table 9. Mean values and standard deviations of Anxiety/Depression and Withdrawn/Depression as a function of Type of Marriage (monogamy/polygamy) and Siblings (6 and under/7 and up)

Measure	Siblings	Type of Marriage	Mean	Std. Deviation	N
Anxiety/ Depression	6 and under	Monogamy	7.10	4.71	216
		Polygamy	6.62	4.41	13
		Total	7.07	4.68	229
	7 and up	Monogamy	6.31	3.77	130
		Polygamy	6.56	4.13	108
		Total	6.42	3.93	238
	Total	Monogamy	6.80	4.39	346
		Polygamy	6.57	4.14	121
		Total	6.74	4.32	467
Withdrawn/ Depression	6 and under	Monogamy	4.75	3.07	216
		Polygamy	5.00	2.83	13
		Total	4.76	3.05	229
	7 and up	Monogamy	3.95	2.65	130
		Polygamy	4.85	3.29	108
		Total	4.36	2.98	238
	Total	Monogamy	4.45	2.94	346
		Polygamy	4.87	3.23	121
		Total	4.56	3.02	467

The analysis revealed no significant effect upon Anxiety/Depression for No. Of Siblings (F (1,463) =0.388, p=. 534, η^2 =. 001), and also for the interaction of No. Of Siblings and Type of Marriage (F (1,463) =0.300, p=. 584, η^2 =. 001). Likewise, no significant main effect of No. Of Siblings was found upon Withdrawn/Depression (F

(1,463) = 0.550, p=. 459, $\eta^2 = .001$), and also no significant interaction between No. Of Siblings and Type of Marriage (F (1,463) = 0.580, p=. 447, $\eta^2 = .001$).

Measure	Siblings	Type of Marriage	Mean	Std. Deviation	Ν
Somatic Complaints	6 and under	Monogamy	2.98	3.69	210
		Polygamy	1.62	2.50	13
		Total	2.90	3.64	223
	7 and up	Monogamy	2.57	3.02	127
		Polygamy	1.84	2.76	107
		Total	2.24	2.92	234
	Total	Monogamy	2.82	3.46	337
		Polygamy	1.82	2.73	120
		Total	2.56	3.31	457
Social Problems	6 and under	Monogamy	4.85	3.84	210
		Polygamy	3.77	3.52	13
		Total	4.78	3.82	223
	7 and up	Monogamy	4.26	3.23	127
		Polygamy	4.69	3.45	107
		Total	4.46	3.34	234
	Total	Monogamy	4.63	3.63	337
		Polygamy	4.59	3.46	120
		Total	4.62	3.58	457

Table 10. Mean values and standard deviations for Somatic Complaints and Social Problems as a function of Type of Marriage (monogamy/polygamy) and No. Of Siblings (6 and under/7 and up)

Examination of the data showed in table 10 revealed no significant effect upon Somatic Complaints for No. Of Siblings (F (1,453) =0.033, p=. 855, η^2 =. 000), and also non-significant interaction effect between No. Of Siblings and Type of Marriage (F (1,453) =0.384, p=. 536, η^2 =. 001). Regarding Emotional Problems, no significant effect was found for No. Of Siblings (F (1,453) =0.452, p=. 502, η^2 =. 001), nor for the interaction between No. Of Siblings and Type of Marriage (F (1,453) =0.520, p=. 471, η^2 =. 002). Furthermore, no significant effect was found upon Social Problems for No on. Siblings (F (1,453) =0.088, p=. 766, η^2 =. 002), nor for the interaction between No. Of Siblings and Type of Marriage (F (1,453) =1.799, p=. 180, η^2 =. 004). The results of the following concepts -Thinking Problems, Attention Problems, Rules Breaching and Aggressive Behavior - are presented in tables 9.1 and 9.2. Examination of the data showed in tables 11 and 12 revealed a non-significant effect upon Thinking Problems for No. Of Siblings (F (1,463) =0.980, p=. 323, η 2=. 002), and also nonsignificant for the interaction between No. Of Siblings and Type of Marriage (F (1,463) =0.471, p=. 493, η 2=. 001). As for Attention Problems, no significant effect was found on this measure for No. Of Siblings (F (1,463) =0.994, p=. 319, η 2=. 002), nor for the interaction between No. Of Siblings and Type of Marriage (F (1,463) =0.250, p=. 617, η 2=. 001).

Table 11. Means and standard deviations of Thinking Problems and Attention Problems as a functionof the Type of Marriage (monogamy/polygamy) and No. Of Siblings (6 and under/7 and up)

Measure	Siblings	Type of Marriage	Mean	Std. Deviation	Ν
Thinking Problems	6 and under	6 and under	8.98	4.68	216
		7 and up	8.75	4.86	130
		Total	8.90	4.74	346
	7 and up	6 and under	9.38	4.94	13
		7 and up	8.13	4.83	108
		Total	8.26	4.83	121
	Total	6 and under	9.00	4.69	229
		7 and up	8.47	4.84	238
		Total	8.73	4.77	467
Attention Problems	7 and under	6 and under	6.08	3.38	216
		7 and up	5.82	3.25	130
		Total	5.98	3.33	346
	8 and up	6 and under	6.69	3.20	13
		7 and up	5.90	3.56	108
		Total	5.98	3.52	121
	Total	6 and under	6.11	3.36	229
		7 and up	5.85	3.39	238
		Total	5.98	3.37	467

Measure	Siblings	Type of Marriage	Mean	Std. Deviation	Ν
Rules, Breaking	8 and under	6 and under	6.89	4.60	216
		7 and up	6.54	3.85	130
		Total	6.76	4.33	346
	9 and up	6 and under	8.46	5.97	13
		7 and up	6.80	5.22	108
		Total	6.98	5.30	121
	Total	6 and under	6.98	4.69	229
		7 and up	6.66	4.51	238
		Total	6.82	4.60	467
Aggressive Behavior	9 and under	6 and under	8.77	6.03	216
		7 and up	8.12	5.47	130
		Total	8.53	5.83	346
	10 and up	6 and under	9.15	6.53	13
		7 and up	7.86	6.29	108
		Total	8.00	6.30	121
	Total	6 and under	8.79	6.05	229
		7 and up	8.00	5.84	238
		Total	8.39	5.95	467

Table 12. Mean values and standard deviations for Rules, Breaking and Aggressive Behavior as a function of Type of Marriage (monogamy/polygamy) and No. Of Siblings (6 and under/7 and up)

No significant effect of No. Of siblings was found upon Rules, Breaking (F (1,463) =1.957, p=. 163, η^2 =. 004), nor for the interaction between No. Of Siblings and Type of Marriage (F (1,463) =0.823, p=. 365, η^2 =. 002). As for Aggressive Behavior, like previous measures, this measure showed no significant effect for No. Of Siblings (F (1,463) =1.080, p=. 299, η^2 =. 002), nor for the interaction between No. Of Siblings and Type of Marriage (F (1,463) =0.118, p=. 731, η^2 =. 000).

3.1.4. The relationship between the number of wives on one hand and emotional, cognitive and behavioral problems of children on the other

In order to perform these analyses, Pearson correlations were conducted between the number of wives and all the dependent variables mentioned above. No significant correlations were found between number of wives and children's anxiety/depression (r=. 21, p=. 32), withdrawn/depression (r=. 16, p=. 53), somatic complaints (r=. 09, p=. 78) and social problems (r=.22, p=. 37). In addition, no significant correlations were found between number of wives and children's thinking problems (r=. 17, p=. 45), attention problems (r=.22, p=. 31), rules breaking (or=. 21, p=. 35) and aggressive behavior (r=. 33, p=. 45).

3.1.5. Effects of type of marriage, sector of residence and the interaction between them

As in the previous similar analysis, we used the two-way ANOVA model in which the type of marriage and sector of residence was treated as independent variables. The dependent variables were all the study measures analyzed above. Tables 13-15 show the results.

Table 13. Mean values and standard deviation of Anxiety/Depression and Withdrawn/Depression as a
function of Type of Marriage (monogamy/polygamy) and Sector (southern Bedouins/northern non-
Bedouins)

Measure	Sector	Type of Marriage	Mean	Std. Deviation	Ν
Anxiety/ Depression	Southern Bedouins	Monogamy	6.69	4.50	297
		Polygamy	6.39	4.24	101
		Total	6.61	4.43	398
	Northern non-Bedouins	Monogamy	7.49	3.61	49
		Polygamy	7.50	3.55	20
		Total	7.49	3.57	69
	Total	Monogamy	6.80	4.39	346
		Polygamy	6.57	4.14	121
		Total	6.74	4.32	467
Seclusion Depression	Southern Bedouins	Monogamy	4.32	2.94	297
		Polygamy	4.63	3.20	101
		Total	4.40	3.01	398
	Northern non-Bedouins	Monogamy	5.22	2.84	49
		Polygamy	6.05	3.22	20
		Total	5.46	2.95	69

Total	Monogamy	4.45	2.94	346
	Polygamy	4.87	3.23	121
	Total	4.56	3.02	467

Examination of the data showed in table 13 revealed a no significant main effect of Sector upon Anxiety/Depression (F (1,463) =2.341, p=. 127, η^2 =. 005), and also non-significant for the interaction between the Sector and Type of Marriage (F (1,463) =0.063, p=. 802, η^2 =. 000). Conversely, a significant main effect of Sector was founded upon Withdrawn/Depression (F (1,463) =7.156, p=. 008, η^2 =. 015), meaning northern non-Bedouins (M=5.46, SD=2.95) recorded significantly higher levels of anxiety/depression than the southern Bedouins (M=4.40, SD=3). As for the interaction between the Sector and Type of Marriage, it was found non-significant (F (1,463) =0.348, p=. 556, η^2 =. 001). Figure 6. shows the differences of Withdrawn/Depression based upon Sector and Type of Marriage.



Figure 6. Differences of Withdrawn/Depression based upon Sector and Type of Marriage

Measure	Sector	Type of Marriage	Mean	Std. Deviation	N
Somatic Complaints	Southern Bedouins	Monogamy	2.64	3.40	289
		Polygamy	1.78	2.75	100
		Total	2.42	3.26	389
	Northern non-Bedouins	Monogamy	3.92	3.65	48
		Polygamy	2.00	2.68	20
		Total	3.35	3.49	68
	Total	Monogamy	2.82	3.46	337
		Polygamy	1.82	2.73	120
		Total	2.56	3.31	457
Social Problems	Southern Bedouins	Monogamy	4.58	3.74	289
		Polygamy	4.40	3.37	100
		Total	4.53	3.64	389
	Northern non-Bedouins	Monogamy	4.90	2.87	48
		Polygamy	5.55	3.82	20
		Total	5.09	3.17	68
	Total	Monogamy	4.63	3.63	337
		Polygamy	4.59	3.46	120
		Total	4.62	3.58	457

 Table 14. Mean values and standard deviations of Somatic Complaints and Social Problems as a function of Type of Marriage (monogamy/polygamy) and Sector (southern Bedouins/northern non-Bedouins)

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Examination of the data showed in table 14 revealed no significant main effect of Sector upon Somatic Complaints (F (1,453) =2.479, p=. 116, η^2 =. 005), nor for the interaction between the Sector and Type of Marriage (F (1,453) =1.233, p=. 267, η^2 =. 003).

Furthermore, no significant main effect of Sector was founded upon Social Problems (F (1,453) =1.982, p=. 160, η^2 =. 004), nor for the interaction between the Sector and Type of Marriage (F (1,453) =0.645, p=. 422, η^2 =. 001).

The results of the following dependent variables - Thinking Problems, Attention Problems, Rules Breaching and Aggressive Behavior - are presented in tables 15 and 16.

 Table 15. Mean values and standard deviations for Thinking Problems and Attention Problems as a function of Type of Marriage (monogamy/polygamy) and Sector (southern Bedouins/northern non-Bedouins)

Measure	Sector	Type of Marriage	Mean	Std. Deviation	N
Thinking Problems	Southern Bedouins	Monogamy	8.65	4.86	297
		Polygamy	7.74	4.62	101
		Total	8.42	4.81	398
	Northern non-Bedouins	Monogamy	10.41	3.67	49
		Polygamy	10.90	5.13	20
		Total	10.55	4.11	69
	Total	Monogamy	8.90	4.74	346
		Polygamy	8.26	4.83	121
		Total	8.73	4.77	467
Attention Problems	Southern Bedouins	Monogamy	5.88	3.44	297
		Polygamy	5.53	3.48	101
		Total	5.79	3.45	398
	Northern non-Bedouins	Monogamy	6.61	2.47	49
		Polygamy	8.25	2.86	20
		Total	7.09	2.68	69
	Total	Monogamy	5.98	3.33	346
		Polygamy	5.98	3.52	121
		Total	5.98	3.37	467

Examination of the data showed in tables 15 and 16 revealed a significant main effect of Sector upon Thinking Problems (F (1,463) =13.044, p=. 000, η 2=. 027), as northern non-Bedouins (M=10.55, SD=4.11) recorded significantly higher problems than the southern Bedouins (M=8.42, SD=4.81). As for the interaction between the Sector and Type of Marriage it was not significant (F (1,463) =1.050, p=. 306, η 2=. 002). Figure 7 shows the differences in Thinking Problems based upon Sector and Type of Marriage.



Figure 7. Differences in Thinking Problems based upon Sector and Type of Marriage

Regarding Attention Problems, a significant main effect of Sector was founded upon this measure (F (1,463) =12.787, p=. 000, η^2 =. 027), meaning that northern non-Bedouins (M=7.09, SD=2.68) reported significantly higher attention problems than the southern Bedouins (M=5.79, SD=3.45). As for the interaction between the Sector and Type of Marriage it was also significant (F (1,463) =4.200, p=. 041, η^2 =. 009). That is, among northern non-Bedouins, children in polygamist families (M=8.25, SD=2.86) reported significantly higher problems than children in monogamist families (M=6.61, SD=2.47) (t (67) =2.383, p=. 020), whereas among southern Bedouins there was no significant difference (t (397) =0.807, p=. 420) between monogamy (M=5.88, SD=3.44) and polygamy (M=5.53, SD=3.48). Figure 8 shows the differences in Attention problems based upon Sector and Type of Marriage.



Figure 8. Differences in Attention Problems based upon Sector and Type of Marriage

Measure	Sector	Type of Marriage	Mean	Std. Deviation	Ν
Rules, Breaking	Southern Bedouins	Monogamy	6.47	4.28	297
		Polygamy	6.38	4.98	101
		Total	6.45	4.46	398
	Northern non-Bedouins	Monogamy	8.49	4.28	49
		Polygamy	10.00	5.93	20
		Total	8.93	4.82	69
	Total	Monogamy	6.76	4.33	346
		Polygamy	6.98	5.30	121
		Total	6.82	4.60	467
Aggressive	Southern Bedouins	Monogamy	8.36	6.04	297
Behavior		Polygamy	7.27	6.00	101
		Total	8.08	6.04	398
	Northern non-Bedouins	Monogamy	9.55	4.19	49
		Polygamy	11.70	6.63	20
		Total	10.17	5.06	69
	Total	Monogamy	8.53	5.83	346
		Polygamy	8.00	6.30	121
		Total	8.39	5.95	467

 Table 16. Mean values and standard deviations for Rules, Breaking and Aggressive Behavior as a function of Type of Marriage (monogamy/polygamy) and Sector (southern Bedouins/northern non-Bedouins)

A significant main effect of Sector was founded upon Rules, Breaking (F (1,463) =18.877, p=. 000, η^2 =. 039), as northern non-Bedouins (M=8.93, SD=4.82) reported higher levels of rules breaking than the southern Bedouins (M=6.45, SD=4.46). Regarding, the interaction between the Sector and Type of Marriage, no significant effect was found (F (1,463) =0.823, p=. 365, η^2 =. 002). Figure 9 shows the differences in Rules, Breaking based upon Sector and Type of Marriage.



Figure 9. Differences in Rules, Breaking based upon Sector and Type of Marriage

As for Aggressive Behavior, it showed a significant main effect for Sector (F (1,463) =10.877, p=. 001, η^2 =. 023). That is, northern non-Bedouins (M=10.17, SD=5.06) reported higher levels of aggressive behavior than the southern Bedouins (M=8.08, SD=6.04). Moreover, the interaction between the Sector and Type of Marriage was found to be marginally significant (F (1,463) =3.615, p=. 058, η^2 =. 008). Examination of the simple effects revealed no significant effects, probably because the fact that the interaction was only marginally significant. The trend of the simple effects was as follows: among northern non-Bedouins, children in polygamist families (M=11.70, SD=6.63) reported higher levels of Aggressive Behavior than children in monogamist families (M=9.55, SD=4.19) (t (67) =1.345, p=. 191), whereas among southern Bedouins, children in monogamist condition (M=8.36, SD=6.04) reported higher levels than the ones in polygamist condition (M=7.27, SD=6) (t (397) =1.532, p=. 126). Figure 10 shows the differences of Aggressive Behavior based upon Sector and Type of Marriage.



Figure 10. Differences of Aggressive Behavior based upon Sector and Type of Marriage

3.1.6. Summary of quantitive result

Summarizing the results, our quantitative section of the thesis revealed several important differences regarding the dependent variables measured.

As the type of family is concerned, our results prove that children from monogamous families recorded somatic problems to a higher degree than children from polygamous families. Second, girls from monogamous families reported more thinking problems compared to girls from polygamous families (with no such differences for boys). Also, among northern non-Bedouins, children in polygamist families reported significantly higher attention problems than children in monogamist families (with no such differences for southern Bedouins). Finally, among northern non-Bedouins, children in polygamist families (with no such differences for southern Bedouins). Finally, among northern non-Bedouins, children in polygamist families reported higher levels of aggressive behavior than children in monogamist families, whereas among southern Bedouins, children in monogamist condition reported higher levels of aggressive behavior than the ones in polygamist condition.

Beyond these findings, our study revealed also differences based upon several demographic conditions, irrespective of the type of family. First, related to gender, we found that the boys recorded higher levels of social problems than girls, and also higher levels of rules breaking and aggressive behavior.

Second, as far as the sector of residence is concerned, we found that northern non-Bedouins recorded significantly higher levels of anxiety/depression than southern Bedouins, and also higher levels of thinking problems, attention problems, breaking rules, and aggressive behavior.

3.2. Qualitative results

3.2.1. Aim and method

The section of quality result presents findings from interviews conducted with children from polygamy families. These interviews were conducted in order to deeply understand the thoughts and feelings of these children in a way that quantitative results could not capture. The approvals for conducting interviews were obtained from each parent and child. The guide of the interview was presented in the Methodology section. All interviews were taped and transcribed verbatim. The data

has been analyzed through thematic analysis method. The results are presented by major themes identified in the children's account.

3.2.2. Results

• Feeling growing in a polygamy family

Children describe various of thoughts and feelings in regard to understanding they live in a polygamous family.

• Social support from the family

One of the most significant issues many children mentioned is having a rich social support system. The children described they could find help and support from several mothers and not only in a single mother such as in a non-polygamy families.

Children describe they have at least three role models in the family - father and two mothers. They fell in this way they gain more wisdom.

Another major advantage that children described in regard to growing in a polygamy family is having rich social relationships inside family with other siblings (or half siblings) as presented with the following citations.

Alongside rich social relationships in family, children also mentioned that growing in a polygamy family means that more caring figures take care upon them and therefore they feel safer.

However, it is important to note that some children view relationships inside family in a negative way, especially in regard to having much noise and hustle in their houses, or in term of rivality and jealousy.

The interviwees with the children show that multi-social relationships in the house could also get very complicated and less of attention given by parents.

• Disadvantages of growing in polygamy families

Children during interviewees mentioned several problems and disadvantages of growing in polygamy families. First, some children argue that children from peer group in school and in the village usually make them that they have more than one mother and therefore they live in a "funny" family. This notion is described in the following citation. Children gave their perspective in regard to relationships between their fathers and mothers. Witnessing conflicts between parents can be quite common also for children living in non-polygamy families, some of the children mentioned the
issues that being married to multiple women involves significantly more problems and conflicts in comparison to being married only to one woman.

• Well-being vs. Experiencing mental or coping problems

In this section there were contradiction results, while some children didn't link between growing in a polygamy family and having more mental problems, while other children mentioned they do experience more problems. These two perspectives are shown in the following examples. First, I will introduce the positive perspective in regard to the lack of problems, and then I will present citations from children who experience more problems.

3.2.3. Summary of qualitative results

Results from interviewees show that feelings of growing in a polygamy family are mixed. Some children reported on happiness and satisfaction, while stressing social support by siblings and mothers, and also by enjoying rich social relationships in the house. On the other hand, other children reported significant negative emotions of feeling neglected, isolated and not having the appropriate response to their needs and problems. Most children mentioned there are always conflicts between parents, including feelings of jealousy and trying to control father's time and resources. Finally, almost all children emphasized economic and financial problems.

More interesting results were observed with families. Children reports a sense of community and belonging is a strong value which is perceived as advantageous concerning social relationships inside the family. An example to such can be the indication of multiple mothers use as a support system what was lacking with single mothers such as in non-polygamy families. Resulting from such are feelings of strength, confidence, and availability for consulting an adult, in addition to having more role models. Moreover, the children described holding rich social relationships, especially among siblings, which leads to ties with more children, so more social support. It appears to belong to a polygamy family expands social relationships within the family and improves the children's well – being as well as their social interactions to cope with life's hardships. Inside with less positive components, consequences of polygamous marital structure, children could also find some positive elements in this family pattern.

Children reported also high social support, getting help from multiple resources (such as other spouses). It seems that social support is highly appreciated among children from polygamy families and in fact the most dominant advantage of living in polygamist family.

Interviewees show that still being part of children mention several disadvantages. Some of them mentioned they feel sometimes different from the peer group and not belonging to it. Children also reported sometimes other children mock them and are even subject to bullying. That means children sometimes even tried to hide their family structure in order to not be different.

Moreover, most of the children mentioned that economic and financial issues are very frequent. Father issue is a salient psychological complex for these children. They mentioned that father usually can't support children and wives financially and that leaves them with many needs unsatisfied. Another effect children emphasized is that there are many conflicts between husband and wives while these conflicts are full of jealousy, revality and financial problems. Interviews revealed also poor and even hostile relationship between the biological father and biological mother, but also between wives which sometimes behave with the lack of warmth and empathy, but with envy and anger. These feelings quite often can escalate to conflicts children are witnessing.

Children in interviews reported they have ambivalent emotions towards living in polygamy families. On one hand, they reported being happy with and proud of their families, but on the other hand, they reported feeling different, and sadly for this reason. These emotions happen together and sometimes leave children confused.

In conclusion, children who are raised in polygamist households have exhibited ambivalent feelings and thoughts.

Chapter 4: Discussion and Conclusion

4.1. Discussion

The current study focused in Polygamy in Bedouin society. The practice of polygamy is a central part of Bedouin women's life. Some of them are part of polygamous marriage as co-wives (Al-Krenawi et al., 2001). Others are familiar with polygamy through family members who practice it. Still, others encounter the practice from a professional context as social workers, activists, lawyers, and so forth.

Additionally, polygamy cultivates gender inequality because it reinforces patriarchy and weakens women's equality in marriage (Kelly, 2007). Polygamy is still relatively prevalent despite the modernization of Bedouin society and Israeli Family Law and the Punitive Code, which forbid this kind of marriage.

Higher rated of psychological and physical abuse in polygamy families could create a negative family climate which could lead into serious problems among children. The main purpose of the current study was to examine the consequences of living in polygamist families of children living in comparison with children living in nonpolygamist families.

To fulfill study's objectives, a mixed method was conducted. All analysis in the thesis are explorative, which involves the fact that they are not driven by hypotheses.

Several important findings were found in this study.

As the type of family is concerned, our results prove that children from monogamous families recorded somatic problems to a higher degree than children from polygamous families. In addition, qualitative results also showed mixed attitudes in regard to growing in a polygamy family. Some children stated that they feel a high level of mental resilience and don't connect between growing in a polygamy family and mental health. On the other hand, other children stated that they feel significant mental problems such as depression, life difficulties and anxiety due to growing in such families.

This pattern of results does not fit prior studies which showed that children from polygamous families report elevated levels of psychiatric problems and symptomatology, including, obsession, compulsion, somatization, phobic anxiety, interpersonal sensitivity, depression, hostility, paranoid ideation, and psychosis (Al-Krenawi & Slonim-Nevo, 2008). Their findings imply that familial pattern of polygamous families leads into these psychological difficulties. On the other hand, former studies suggest that polygamy families don't necessarily create complicated relationships within family, but rather positive ones. For example, polygamous families could provide a greater number of role models, greater warmth and affection, and that this has a positive effect on children's general mental health (Elbedour, Bart & Hektner, 2000; Krishnakumar & Buehler, 2000). Nevertheless, it is particularly important to notice that in the current study, children from monogamous families. This result

is not in line with previous studies that showed that children from polygamy families are more prone to suffer from psychological disorders in comparison with children from non- polygamy families (Al-Krenawi & Slonim-Nevo, 2008; Al-Sughayr & Mazin, 2012).

Another possible explanation for more social and psychological problems of children from monogamous families is compensated mechanism. Although children in a non-polygamous families could experience some difficulties in a relatively unusual familial pattern, these children could enjoy from several caring figures (e.g. Mothers) who can take of them, especially in times of distress. Therefore, in case of a difficulty for the child or one of the wives, the child could find close assistance. This kind of relationship is not possible in a non-polygamous families (Elbedour, Bart & Hektner, 2007).

Specifically, girls from monogamous families reported more thinking problems compared to girls from polygamous families (with no such differences for boys), which is not a consistent finding with previous work relating higher likelihood for thinking problems being more prevalent among girls from polygamous families (Ochoa, Usall, Cobo, Labad, & Kulkarni, 2015). It is safe to assume that girls raising in polygamous families have a broader network of social support. Hence, may feel safer and have more psychological resources which serve as buffers in front of stressful life events.

In addition, among non-polygamous families a significant correlation was found between rule breaking and gender while males demonstrated more rule breaking in compared with females. A similar pattern was found in polygamous families, while a significant relationship was found between rules breaking and gender while males are more rules breaker in compared with females. The explanation for this result is rooted in the environmental conditions while more social tolerance is presented for aggressive males than females. Males usually learn that they need to use power and dominance in order to fulfill their interests. On the other hand, females are more prone to compromise and peaceful solutions (Archer, 2000). This result is also consistent with qualitative results, while some children mentioned that one of the main influences of growing in polygamy families is the feeling that family is not a safe place for them and that they experience being home as a chaotic experience with no boundaries.

Another examination argued that differences will be found in behavioral, emotional, academic and adjustment problems, according to the age of children, in polygamous families and families that are not polygamous. This examination was not confirmed, families don't demonstrate different levels of meaning young children, Anxiety/Seclusion Depression, Somatic Complaints, Social, Emotional, Thinking, or Attention Problems, Rules Breaching or Aggressive Behavior in comparison with children from older children. This result is not consistent with previous studies that show that psychological problems tend usually to decline over time, meaning there is a negative association among children between age and psychopathology. For example, Applegate et al (1997) reported on a negative association between ADHD and age, while ADHD symptoms tend to decline over time (Applegate et al., 1997). Researched explained this phenomenon by critical changes in the human brain that occur during the early adolescence that lead into less severe manifestation of ADHD. In addition, when children are diagnosed with ADHD in early childhood they might get an academic support which assist the child to build academic skills that enhance adjustment to school (Kieling et al., 2014).

In addition, it was tested whether differences will be found in behavioral, emotional, academic and adjustment problems, according to the number of siblings in polygamous families and families that are not polygamous. In order to test this examination interactions between the number of siblings and the type of marriage were examined. This examination was not confirmed. Both among polygamous families and non-polygamous families no association was found between siblings' numbers and psychological problems. This result is opposed to former studies which found that sibling rivalry and conflict is more severe in polygamous families, since it is demonstrated in a more extreme fashion (Al-Krenawi & Lightman, 2000; Elbedour et al., 2000). Therefore, these studies predict that there is a positive liner relationship between number of siblings and psychological problems. Nevertheless, the results of current study didn't support this hypothesis.

Also, among northern non-Bedouins, children in polygamist families reported significantly higher attention problems than children in monogamist families (with no such differences for southern Bedouins). Finally, among northern non-Bedouins, children in polygamist families reported higher levels of aggressive behavior than children in monogamist families, whereas among southern Bedouins, children in monogamist condition reported higher levels of aggressive behavior than the ones in polygamist condition.

These findings suggest that children from non- Bedouins society are prone to demonstrate more psychopathology in compared with children from Bedouins society. It is possible is that among families in Bedouin society, there are more protective factors against psychiatric problems such as more help between family members and also better relationship with support factors such as doctors and psychologists. Therefore, when parents in Bedouin part indicate some signals for Seclusion Depression, they provide more assistance to children in comparing with non-Bedouin children (Al-Krenawi & Lightman, 2000). In this disposition, Roer-Strier and Rosenthal (1997) argued that discrepancies will be found in emotional, behavioral, academic and adjustment problems by sector (Bedouin, non-Bedouin), in polygamous families and non-polygamous families. In order to test this examination interactions between sectors and marriage type were inspected. This examination was not confirmed. Notwithstanding, it was found that Seclusion Depression for being higher among children from northern non-Bedouins in comparison with southern Bedouins among the total sample. Moreover, Northern non-Bedouins have more rule breaching, emotional problems, aggressive behavior and also attention difficulties in comparison to southern Bedouins. This set of findings suggests that children from non- Bedouins community is prone to demonstrate more psycho- pathology compared to children from Bedouins society. It is feasible that among families in Bedouin society, there are more safeguarding factors against psychiatric problems like greater help and aid between family members and also better relationships with support factors such as doctors and psychologists. Therefore, when parents in Bedouin part indicate some signs for Seclusion Depression, they provide more assistance to children in comparison to non-Bedouin children (Al-Krenawi & Lightman, 2000). Proposed that one of the main examinations argued that differences will be found in behavioral, emotional, academic and adjustment problems, according to the sector (Bedouin, non-Bedouin), in polygamous families and families that are not polygamous. In order to test this examiner, interactions between sector and type of marriage were examined. This examination was not confirmed. Nevertheless, it was found that Seclusion Depression for being higher among children from northern non-Bedouins in comparing with southern Bedouins among total sample. Moreover, Northern non-Bedouins have more Emotional Problems, Rules Breaching, Aggressive

Behavior and also Attention Problems in comparing with southern Bedouins. These findings suggest that children from non- Bedouins society are prone to demonstrate more psychopathology in compared with children from Bedouins society. It is possible is that among families in Bedouin society, there are more protective factors against psychiatric problems such as more help between family members and also better relationship with support factors such as doctors and psychologists. Therefore, when parents in Bedouin part indicate some signals for Seclusion Depression, they provide more assistance to children in comparing with non-Bedouin children (Al-Krenawi & Lightman, 2000). Objectives of child-rearing practices is to socialize children to fit the 'adaptive adult' image of a given culture. The appearance of the 'adaptive adult' is the indication of the existing culture's values and norms. Subsequently, the assessment of child behavior to be acceptable or perhaps problematic should be associated with the socializing agent's conception of an 'adaptive adult'. Considering the focus of Bedouin society on community, group cohesion, social control, and obedience and respect of elders, it is expected that Bedouin children will exhibit more over-controlled behaviors and fewer undercontrolled, thus less social problem behaviors (Auerbach, Goldstein & Elbedour, 2000).

These results are also consistent with former studies which examined behavioral, emotional, and academic outcomes, and found that the children of non-Bedouin suffer from more emotional problems in comparison with Bedouin children. One of the possible explanations is that these children usually live in a different cultural and social context, and therefore demonstrate adjusting problems which are presented mostly as emotional problems. Nevertheless, it is vital to note that this result is not consistent with other studies that showed greater levels of externalizing behavior (especially attention problems) and school absenteeism, as well as lower levels of academic achievement among the Bedouin population (Elbedour, Bart & Hektner, 2000).

In addition, qualitative interviews among children who grew in polygamous families yielded more interesting results. First, children describe that one of the main advantages is having a strong social relationships inside the family. The children described they could find help and support in several mother figures and only in a single mother such as in a non-polygamy families. Therefore, they feel stronger support and confidence when needed to consult an adult, in addition to having more

role models. Moreover. Children reported they have rich social relationships, specifically among siblings. Since they have many siblings, children feel their social network is strong and they could get assistance from older brothers and sisters, even though not sharing the same mother. These results are consisted with previous studies that showed the in some polygamous families, children indeed feel a high level of social support and strong relationships in a way that assist them to cope with life's adversities (Elbedour et al., 2002). It seems that alongside many negative consequences of polygamous marital structure, children could also find some positive elements in this family pattern.

Alongside to these important advantages, children mention several disadvantages. First, some of them mentioned they feel sometimes remote and different from peer group that mock them. Second, most of the children mentioned that economic and financial issues are very frequent. They mentioned that father usually can't support children and wives financially and that leaves them with many needs unsatisfied. Third, most of the children emphasized that there are many conflicts between husband and wives while these conflicts are full of jealousy and also financial problems.

Moreover. In the emotional aspect, interviews showed ambivalent emotions towards living in polygamy families such as happy and proud, but also sadness and feeling different in a negative manner. These contradicted feelings show that being part of polygamy family is not simple and it is perceived as complicated. These findings are consistent with other findings in this thesis that show mixed emotions among children. Children reported also high social support, getting help from multiple resources (such as other spouses). It seems that social support is highly appreciated among children from polygamy families and in fact the most dominant advantage of living in polygamist family. This way, children feel they have a lot to rely on when things go wrong.

On the other hand, children reported that they feel that they are not belonged and also different from other children who sometimes mock at them and even conducting bullying in verbal violence and harassment. That means children sometimes even tried to hide their family structure in order not to be different.

Another difficult point that was revealed from interviews is relations between a biological father and biological mother as poor and even hostile. In addition, also the relationship between wives sometimes lacks of warmth and help and seems to envy and fear. These relationships sometimes reach into conflicts. This finding is consistent

with the notion that it is difficult for a single husband to deal with complicated relationships of several wives.

In sum, children in interviews reported they have ambivalent emotions towards living in polygamy families. From one way that report happiness and proud, but from another way, they reported sadness and feeling different in a negative manner. These emotions happen together and sometimes leave children confused.

Qualitative part of this study showed that another difficult point that was revealed from interviews is relations between a biological father and biological mother as poor and even hostile. The relationship between wives is not simple and sometimes lack of warmth and help and seems to envy and fear. These relationships sometimes reach into conflicts. This finding is consistent with the conception that a it is difficult for a single husband to deal with complicated relationships of several wives.

4.2. Conclusions

This study aimed to examine the consequences of living in polygamist families of children living in comparison with children living in non-polygamist families. Specifically, data were gathered among 468 Israeli Arab children and adolescents for level of Anxiety /Depression, Withdrawal/Depression, Somatic complaints, Social Problems, Thinking Problems, Attention Problems, Rule Breaking behavior and aggressive behavior, to evaluate if teenagers living in different type of families (polygamist vs. non-polygamist) are different/similar.

This is the first study that assessed children from Polygamous families, both from Bedouin and non-Bedouin sectors (mostly from Northern Israel). This distinction is very important since there are cultural differences between these two populations which could results in different consequences of Polygamous marriage.

In sum, the results of the current study found that females have more Thinking Problems in comparing with the males among non-Polygamous, while males demonstrate more rule breaking in compared with females (both among non-Polygamous and Polygamous families). In addition, non-Bedouin children have *more* Emotional Problems, Rules Breaching, Aggressive Behavior and also Attention Problems in comparing with Bedouin children. Finally, the interaction between Gender and Type of Marriage was marginally significant at Thinking Problems. Gender was also significant at Rules Breaching and marginally significant at Aggressive Behavior.

According to the findings of the current study that indicate a slight advantage for polygamous upon non-polygamous families in psychological well-being, it is plausible that children, raising in polygamous families have larger and stronger social support network since they have much closer relationship in the family. Therefore, these children could consult significant others when they feel distressed or need assistance in life crises. On the other hand children from non-polygamous families, don't enjoy from these resources and have a narrow and a thin network of support. Nevertheless, this effect is relatively small, while in most measures no significant differences were found. It is possible to explain that these children from nonpolygamous families compensate the lack of strong and rich social support by other means such as friends, teachers and etc.

This current study has some limits. Foremost, problems were reported by students, therefore, might be bias. Increased reliability could have accomplished with a more versatile population comprising teachers, and parents. Another limitation concerns the measurement of socioeconomic status of families. Since there are great scales of unemployed families among subjects living in southern Israel, most of the children didn't know the socioeconomic status of their families. Therefore, this hypothesis was not examined. Ultimately, alongside the associations were found in this study, no evidence-based suggestions could be given in order to explain the mechanisms which underlie the results. Additional work is suggested in attempting to explain dissimilarities between polygamous and non- polygamous families based on additional variables such as family variables

4.3. Future directions

1. It is recommended to compare children in Bedouin families in Israel and in the Palestinian Authority.

2. use more diverse psychological tools to examine the consequences of polygamy on younger children, such as observations of children when interacting with parents.

3. Do a longitudinal study to test the consequences on children from a young age to adolescence

4. Children from a polygamous family should be examined in institutions such as a health or mental health center, and schools.5. Comparative studies should be encouraged among polygamous families, not only among the Bedouin, but also in non-Bedouin sectors, since the phenomenon of polygamy is expanding in a non-Bedouin society in Israel, and there are no studies in this field other than my research.

SELECTIVE BIBLIOGRAPHY

Achenbach T.M., & Rescola, L.A (2004). Youth Self-Report (YSR) - 11 - 18 YEARS

"Aseba".

- Adams, B., & Mburugu, E. (1994). Kikuyu bridewealth and polygamy today. *Journal of Comparative Family Studies*, 25, 159–166.
- Al-Haj, M. (1987). Social change and family processes: Arab communities in Shefar-A'm. London: Westview Press.
- Al-Krenawi, A. (1996). Groupwork with Bedouin Widows of the Negev. Medical Clinic. Affilia, 11, 303-318.
- Al-Krenawi, A. (1998). Family therapy with a multiparental/ multispousal family. *Family Process*, 37(1), 65–82.
- Al-Krenawi, A., Graham, J. R., & Al-Krenawi, S. (1997). Social work practice with polygamous families. *Child and Adolescent Social Work Journal*, 14(6), 445–458.
- Al-Krenawi, A., and Lightman, E. S. (2000). "Learning, Achievement, Social Adjustment, and Family Conflict among Bedouin-Arab Children from Polygamous and Monogamous Families." *Social Psychology*, 140(3):345–355.
- Al-Krenawi, Graham, & Izzeldin .(2001). The Psychological Impact of Polygamous Marriages on Palestinian Women, 34 *Women & Health*, 1, 3, 12.
- Al-Krenawi, A. & Lev-Wiesel, R. (2002). Wife Abuse Among Polygamous and Monogamous Bedouin-Arab Families, 36 *Journal of Divorce and Marriage*, 151, 158.
- Al-Krenawi, A. & Slonim-Nevo, V. (2008). The Psychological Profile of Bedouin Arab Women Living in Polygamous and Monogamous Marriages, 89 *FAM. SOC'Y: J. CONTEMP. SOC. SCI.* 139, 145-46.
- Altman, I., & Ginat, J. (1996). Polygamous families in contemporary society. Cambridge, UK: Cambridge University Press. Anderson, C.M. (2000). "The Persistence of Polygyny as an Adaptive Response to Poverty and Oppression in Apartheid South Africa." Cross-cultural Research. 34(2): 99-112.
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: a meta-analytic review. *Psychological Bulletin*, 126 (5), 651.
- Applegate, B., Lahey, B. B., Hart, E. L., Biederman, J., Hynd, G. W., Barkley, R. A., & Shaffer, D. (1997). Validity of the age-of-onset criterion for ADHD: a report from the DSM-IV field trials. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36 (9), 1211-1221.
- Auerbach, J. G., Goldstein, E., & Elbedour, S. (2000). Behavior problems in Bedouin elementary school children. *Transcultural psychiatry*, *37* (2), 229-241.
- Bagchi, S., & Pati, A. K. (2015). Monogamy, polygamy, and other properties of entanglement of purification. *Physical Review A*, 91 (4), 042323.
- Beaman, L. (2014). Polygamy in Primetime: Media, Gender and Politics in Mormon Fundamentalism.
- Bove, R., & Valeggia, C. (2009). Polygyny and women's health in sub-Saharan Africa. *Social Science & Medicine*, 68 (1), 21-29.
- Breslau, N., Davis, G.C., Andreski, P., Peterson, E.L., & Schultz, L. (1997). Sex differences in posttraumatic stress disorder. *Archives of General Psychiatry*, 54, 1044–1048.

- Cameron, R & Molina-Azorin, J. F. (2011),"The acceptance of mixed methods in business and management research", *International Journal of Organizational Analysis, Vol. 19 Iss: 3* pp. 256 271.
- Chaleby, K. (1987). Women of polygamous marriage in outpatient psychiatric services in Kuwait. *International Journal of Family Psychiatry*, 8, 25–34.
- Chamie, J. (1986). Polygamy among Arabs. Population Studies, 40, 55-65.
- Committee on Polygamous Issues. 1993. Life in Bountiful: A Report in the Lifestyle of a Polygamous Community. Prepared by the Committee on Polygamous Issues, April.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd Ed.). Thousand Oaks, CA: Sage.
- Crookston, E. M. (2015). Love and (Polygamous) Marriage?. Journal of moral philosophy, 12 (3), 267-289.
- Cyranowski, J.M., Frank, E., Young, E., & Shear, K. (2000). Adolescent onset of the gender difference in lifetime rates of major depression. *Archives of General Psychiatry*, 57, 21–27.
- Dangor, Suleman. (2001). "Historical Perspective, Current Literature and an Opinion Survey among Muslim Women in Contemporary South Africa: A Case Study." *Journal of Muslim Minority Affairs*. 21(1): 109-129
- Elbedou, N. (2008). Explaining cross-national differences in polygyny intensity. *Cross- Cultural Research*, 42, 103-117.
- Elbedou, S., Bart, W. M., & Hektner, J. M. (2000). Scholastic achievement and family, marital structure: Bedouin Arab adolescents from monogamous and polygamous families in Israel. *Journal of Social Psychology*, 140, 503–515.
- Elbedou, S., , Onwuegbuzie AJ, Caridine C, Abu-Saad H (2002). The effect of polygamous marital structure on behavioral, emotional, and academic adjustment in children: a comprehensive review of the literature. *Clinical Child and Family Psychology Review*, 5, 255–271.
- Elbedour, S., Hektner, J.M., Morad, M., and Abu-Bader, S.H. (2003). Parent-Adolescent Conflict and Its Resolution in Monogamous and Polygamous Bedouin Arab Families in Southern Israel .
- Elbedour, S., Bart, W., & Hektner, J. (2007). The relationship between monogamous/polygamous family structure and the mental health of Bedouin Arab adolescents. *Journal of adolescence*, *30* (2), 213-230.
- Forbes, Stephanie. (2003). "Why Just Have One?' An Evaluation of the Anti-Polygamy Laws Under the Establishment Clause." *Houston Law Review*. 39: 1517-1547
- Gwanfogbe, P. N., Schumm, W. R., Smith, M., & Furrow, J. L. (1997). Polygyny and marital life satisfaction: An exploratory study from rural Cameroon. *Journal of Comparative Family Studies*, 55-71.
- Ilkkaracan, P. (2001). Islam and women's sexuality: a research report from Turkey.
- Hales, B. C., Palmer, D., Perrin, D., Larson, J. J., & Tracy, K. (2006). Keep Sweet: Children of Polygamy.
- H'ondt, G. (1976). Conflict types among Bedouin woman. Notes on the Bedouin, Midreshed Sda-Boker: Ben Gurion University of the Negev, Vol. 7, (pp. 19–29).
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33 (7), 14-26.
- Kieling, C., Kieling, R. R., Rohde, L. A., Frick, P. J., Moffitt, T., Nigg, J. T.,... & Castellanos, F. X. (2010). The age at onset of attention deficit hyperactivity disorder. *The American journal of psychiatry*, 167(1): 14-16.

- Kelly, L. M. (2007). Bringing international human rights law home: An evaluation of Canada's family law treatment of polygamy. U. Toronto Fac. L. Rev., 65, 1.
- Kessler, R. C. (2003). Epidemiology of women and depression. Journal of affective disorders, 74 (1), 5-13.
- Krishnakumar, A. and Buehler, C. (2000). Interpersonal conflict and parenting behaviors: a meta-analytic review. *Family Relations*, 49, 29–40.
- Lev-Wiesel & Al-Krenawi, (1999). Attitudes toward and perceived psychosocial impact of female circumcision as practiced among the Bedouin-Arabs of the Negev. *Family Process*, 38(4) 431-43.
- Low, B. S. (1988). Measures of polygyny in humans. *Current Anthropology*, 29 (1), 189–194. ^{Google} Scholar CrossRef.

Nolen-Hoeksema, S., & Girgus, J.S. (1994). The emergence of gender differences in depression in adolescence. *Psychological Bulletin*, 115, 424–443

- Ochoa, S., Usall, J., Cobo, J., Labad, X., & Kulkarni, J. (2012). Gender differences in schizophrenia and firstepisode psychosis: a comprehensive literature review. Schizophrenia research and treatment, 2012, Article ID 916198, 9 pages.
- Rao, N. (2016). Polygamy and Monogamy with Extramarital Partners Are Associated with Negative Sexual Health Outcomes Among Married, Malawian Women. In 2016 National STD Prevention Conference. CDC.
- Sargent, C., & Cordell, D. (2003). Polygamy, disrupted reproduction, and the state: Malian migrants in Paris, France. *Social Science & Medicine*, 56 (9), 1961-1972.

Sathar, Z., & Ahmed, T. (1992). Proximate determinants of fertility. Demographic and Health-Survey, 85.

- Sigman, S. M. (2006). Everything lawyers know about polygamy is wrong. Cornell JL & Pub. Poly, 16, 101.
- Shepard, L. D. (2013). The impact of polygamy on women's mental health: a systematic review. *Epidemiology* and Psychiatric Sciences, 22 (01), 47-62.
- Starr, S., & Brilmayer, L. (2003). Family separation as a violation of international law. *Berkeley J. Int'l L.*, 21, 213.
- Strassmann, Beverly I. (1997). "Polygyny as a Risk Factor for Child Mortality among the Dogon." *Current Anthropology*, 38(4), 688-695.
- Tashakkori, A, and Teddlie, C. (Eds.) (2003) *Handbook of Mixed Methods in Social & Behavioral Research,* Sage, California.

Valsiner, J. (1989). Organization of children's social development in polygamic families. (Ed.), Child development in cultural context (pp. 67–86). Toronto: Hogrefe and Huber.

- White, D. (2004). "An Epidemic Fed by Polygamy, Poverty and Poor Health: HIV/AIDS: Nigeria Was Late to Confront the Disease." *Financial Times*, (February 24): 4.
- Witte Jr, J. (2015). The western case for monogamy over polygamy. Cambridge University Press.

Zeitzen, M. K. (2008) Polygamy: a cross-cultural analysis, Oxford: Berg.