

TITLE

Around consensual non-monogamies – assessing attitudes toward non-exclusive relationships

AUTHOR

Grunt-Meyer, Katarzyna and Campbell, Christine

JOURNAL

The Journal of Sex Research

DATE DEPOSITED

2 April 2015

This version available at

<https://research.stmarys.ac.uk/id/eprint/858/>

COPYRIGHT AND REUSE

Open Research Archive makes this work available, in accordance with publisher policies, for research purposes.

VERSIONS

The version presented here may differ from the published version. For citation purposes, please consult the published version for pagination, volume/issue and date of publication.



Around consensual non-monogamies – assessing attitudes toward non-exclusive relationships

Journal:	<i>The Journal of Sex Research</i>
Manuscript ID:	14-220.R2
Manuscript Type:	Original Article
Keywords:	Swinging/Nonmonogamy/Polyamoy, Special Populations/Gay, lesbian, bisexual, Societal Attitudes, Quantitative/Statistical /Survey, Psychology and sexuality

Around consensual non-monogamies – assessing attitudes toward non-exclusive relationships

Abstract

Consensual non-monogamy is a term used to describe intimate romantic relationships which are sexually and/or emotionally non-exclusive. The present study examined the social norms which are violated by different forms of consensual non-monogamy, and the negative judgements that result. We asked 375 participants to rate hypothetical vignettes of people involved in one of five relationship types (monogamy, polyamory, an open relationship, swinging, and cheating) on items related to relationship satisfaction, morality, and cognitive abilities. The monogamous couple was perceived most favourably, followed by the polyamorous couple, then the open and swinging couples who were rated equally. Participants judged the cheating couple most negatively. Although social norms of sexual and emotional monogamy are important, we conclude that the aspect that has the most effect on judgments is whether the relationship structure has been agreed to by all parties.

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40

Consensual non-monogamy is a term used to describe intimate romantic relationships which are negotiated between more than two people and are therefore non-exclusive, either sexually or emotionally or in combination (Conley, Moors, Matsick & Ziegler, 2013). Societal interest in consensually non-monogamous relationships is growing (Barker & Langdridge, 2010), perhaps as a function of recent legal changes in the recognition of same sex partnerships which have brought an increased awareness of alternatives to the standard model of heterosexual monogamy (Rubel & Bogaert, 2014). The “slippery slope” argument, namely that if equal marriage were to be legalised then the next development would be multiple relationships becoming more prevalent, was often deployed during marriage equality debates (Scheff, 2011). When Rick Santorum was campaigning for the US Republican Party presidential nomination in 2012 and was speaking about his objection to marriage equality he said, “So, everybody has the right to be happy? So, if you’re not happy unless you’re married to five other people, is that OK?” (Corn, 2012). The use of consensual non-monogamy as an example of unacceptability indicates the substantial negative opinion directed towards these relationship structures.

41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

It is hard to evaluate how far down the “slope” society has “slipped” because the prevalence of consensual non-monogamy is extremely hard to estimate, not least because people who practice these relationships are often closeted (Barker & Langdridge, 2010). Frequency estimates vary quite widely, often depending on the characteristics of the sample or the sampling technique. For example, 33% of Page’s (2004) bisexual participants reported being in a consensually non-monogamous relationship, whereas Conley, Moors, Matsick and Zeigler (2011) report that approximately 4-5% of their heterosexual online sample identified as consensually non-monogamous. Whatever the

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

3

1
2
3 prevalence of consensual non-monogamy, and whether it is on the rise or not, what is
4
5 certain is that there is an increasing amount of academic research being conducted on
6
7 these types of relationships (see Barker & Landgridge, 2010, for a review).
8
9

10 Rubel and Bogaert (2014) and Matsick, Conley, Ziegler, Moors, and Rubin
11
12 (2013) delineate three types of consensual non-monogamy that are consistently discussed
13
14 in the literature: swinging, open relationships, and polyamory. Definitions of these three
15
16 styles are subject to debate (see Haritaworn, Lin & Kleese, 2006; Barker, 2005; Klesse,
17
18 2006 for discussions) but they are most commonly described as follows. Swinging is a
19
20 relationship in which a couple engages in extra-dyadic sex, usually at parties or social
21
22 situations where both partners are present. Open relationships are dyadic relationships in
23
24 which partners can have extra-dyadic sex partners. Polyamorous relationships are those in
25
26 which not only sexual but emotional relationships are conducted with multiple partners.
27
28 The study of consensual non-monogamy is interesting for social scientists, both in terms
29
30 of the implications for psychological theory and also in terms of the implications for the
31
32 individuals who engage in these relationships. One serious implication of being
33
34 consensually non-monogamous is that it apparently invites negative social judgements.
35
36 Mitchell, Bartholomew, and Cobb (2014) report that the majority of polyamorous people
37
38 believe there to be a prejudice towards polyamory; the nature and origin of the prejudice
39
40 against consensual non-monogamy is the focus of the present study.
41
42
43
44
45
46
47

Theoretical framework

48
49
50 Two recent studies (i.e. Conley et al., 2013, Matsick et al., 2013) on perceptions
51
52 of consensual non-monogamy used the theoretical concept of stigma, defined there as a
53
54 negative attitude towards people displaying a norm-violating characteristic (Dovidio,
55
56 Major, & Crocker, 2000). This theoretical framework does not, however, include
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

4

1
2
3 components that are incorporated in current concepts of stigma, such as experience of
4 separation, status loss and discrimination (Link & Phelan, 2001). For this reason we have
5
6 chosen to describe the societal attitudes toward non-monogamous choices in terms of
7
8 assigning negative or positive attributions to different types of relationships.
9
10

11
12
13 Such attributions can be formed as a result of linking one distinctive trait of
14
15 people with an array of unrelated characteristics (Thorndike, 1920). If a single negative
16
17 trait leads to negative judgments of person's other characteristics, it is called a "devil
18
19 effect", the converse is the "halo effect", where an individual is assessed positively based
20
21 on a single positive attribute (Nisbett & Wilson, 1977). These two effects act as a form of
22
23 a heuristic that allows for fast interpersonal judgments. Studies indicate that discerning
24
25 immorality is one of the strongest causes of the "devil effect" (e.g. Martijn, Spears, Van
26
27 der Pligt, & Jakobs, 1992); other undesirable traits (e.g. low intelligence) have a much
28
29 lower impact on the overall evaluation of a person. Therefore, overall negative
30
31 assessment of people engaged in consensual non-monogamy is not surprising as it
32
33 violates many Western cultural norms about romantic relationships which encompass
34
35 judgments about what is and is not moral (Anderson, 2010).
36
37
38
39

40
41 The social intuitionist model of moral judgment (Haidt, Koller & Dias, 1993;
42
43 Haidt, 2001) is founded on the assumption that judgment happens first and rationalization
44
45 follows after, if at all. Haidt based his theory on a series of studies of how people make
46
47 moral judgments when they are presented with ethically contentious scenarios such as
48
49 sibling incest where pregnancy was ruled out. Haidt characterized moral reasoning as
50
51 "more like a lawyer defending a client than a judge or scientist seeking truth" (Haidt,
52
53 2001, p. 820). People confronted with a description of sibling incest judged the siblings'
54
55 act as morally wrong but were unable to explain why or justify their decisions, simply
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

5

1
2
3 citing violations of social norms. Haidt's theoretical account of moral judgments gives an
4 explanation for the origin of the negativity surrounding consensual non-monogamy. Four
5 relationship norms that invite moral judgments and are particularly relevant to
6 consensually non-monogamous relationships are consensuality, interdependence of love
7 and sex, sexual monogamy, and emotional monogamy. Monogamy satisfies all the
8 norms, whereas polyamory violates the norms of sexual and emotional monogamy, and
9 open and swinging relationships violate the norm of sexual monogamy and the norm that
10 sex should only occur in a loving relationship. By breaking one or more of these norms a
11 "devil effect" is conjured around consensual non-monogamy and the people who practice
12 it, independent of any actual harm as a result of the relationship styles.
13
14
15
16
17
18
19
20
21
22
23
24
25
26

Existing Research on Stigma Towards Consensual Non-Monogamy

27
28
29 Two papers were recently published which reported research specifically aimed at
30 examining the negative attitudes held towards consensual non-monogamy. The present
31 study expands on these studies so they are discussed here in some detail. In their final
32 study Conley et al. (2013) asked a convenience sample of 269 participants to rate general
33 characteristics of a couple described in a vignette as "sexually non-monogamous".
34 Compared to a monogamous couple, participants rated the consensually non-
35 monogamous couple as having a poorer quality relationship; they also rated them more
36 harshly on arbitrary traits such as paying taxes on time. This was the first paper to
37 explicitly investigate the negative attitudes associated with consensual non-monogamy
38 using a vignette approach and it generated a number of supportive commentaries along
39 with ideas to improve the methodology and theoretical frame of the research (Hegarty,
40 2013; Salvatore, 2013; Blaney & Sinclair 2013; Day, 2013).
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47

One criticism of Conley et al.'s methodology was the lack of distinction between different types of consensual non-monogamy. The label used in the study was "consensual non-monogamy" but the relationship described in the vignette was clearly an open relationship. Additionally, a confound was introduced because the monogamous couple were described as always having been monogamous; in contrast the "consensually non-monogamous" couple were described as having opened up their relationship only one year previously, thus implying that they were dissatisfied in some way. Matsick et al. (2013) addressed the first of these two critiques by delineating three types of consensually non-monogamous relationships: swinging, open, and polyamorous relationships. They addressed the second critique by asking their 126 participants, who were mostly undergraduates, to rate abstract descriptions of relationships rather than vignettes of specific people. They found that polyamory was perceived most positively of the three consensually non-monogamous relationships, followed by open relationships with swinging perceived most negatively. However, there was no comparison group of monogamy, so it is difficult to conclude from this study alone that consensually non-monogamous relationships are in fact assessed as worse than monogamy. Matsick et al. asked participants to rate the relationship styles on eighteen characteristics which were a mixture of relationship relevant and arbitrary traits, but another limitation is that they did not distinguish between the two categories in their analysis.

48
49
50
51
52
53
54
55
56
57
58
59
60

These two studies, taken together with other research (e.g. Burris, 2013; Moors, Matsick, Ziegler, Rubin & Conley, 2013) suggest that people engaged in consensually non-monogamous relationships are not only judged to have poorer relationships but that the negative assessment spreads to unrelated traits, such as their intelligence. Moors et al. (2013) urge researchers to examine "the unique predictors of stigma associated with

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

7

consensually non-monogamous relationships” (p.63). In other words it is necessary to isolate the norms that are being broken by different relationship styles and examine their relative impact.

Aims of the Current Study

We had three aims in this study: we wanted to clarify which norm violations were driving the negative judgments around consensual non-monogamy; we also wanted to determine which type of characteristics would be most negatively assessed; finally we wanted to examine how the characteristics and experiences of the people making the judgments influenced their judgments.

Matsick et al. (2013), by comparing polyamory, swinging, and open relationships, were able to examine whether attitudinal negativity could be attributed to underlying beliefs that sex should only happen in relationships with an emotional aspect (Peplau, Rubin & Hill, 1977), or whether it could be a results of violating the maxim of there only being “one true love” (Medora, Larson, Hortaçsu & Dave, 2002). Matsick et al.’s data showed that polyamory was judged less harshly than open or swinging relationships, suggesting that the belief that sex should not occur without an emotional connection is more powerful than the idea that we can only love one person. However, this only addresses some of the relationship norms that are relevant, ignoring norms about consensuality and sexual monogamy. In the present study we included a relationship style that was sexually monogamous (i.e. monogamy) and a relationship style that was not consented to by all parties (i.e. cheating) in order to isolate the effects of violating four relevant norms. By comparing these five relationship styles we can determine whether the number of norms violated influences attitudes and also which of the norms are most influential. Monogamy satisfies all the norms. Polyamory violates the norms of sexual

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

8

1
2
3 and emotional monogamy but satisfies the norm that love and sex are interdependent.

4
5 Open relationships and swinging both uphold the norm of emotional monogamy but

6
7 violate the norms of sexual monogamy and that love and sex are interdependent.

8
9
10 Cheating satisfies only the emotional monogamy norm. Therefore, we predicted that the

11
12 monogamous couple would be the most positively judged followed by polyamory, then

13
14 the open and swinging couples who would be equally assessed, and finally that the

15
16
17 cheating couple would be most negatively judged.

18
19
20 Our second hypothesis was directed towards investigating the nature of the traits
21
22 which would be assessed differently. In Conley et al.'s (2013) fourth study they asked
23
24 their participants to rate monogamous and consensually non-monogamous relationships
25
26 on two categories of traits: relationship related characteristics and arbitrary traits, because
27
28 they rightly hypothesized that the devil effect (i.e. spreading negative judgment onto
29
30 those arbitrary traits) would occur. In the present study we asked our participants to rate
31
32 the relationship styles on three categories. The first category dealt with the quality of
33
34 relationships, the two other categories were analogue to the arbitrary traits scale used by
35
36 Conley et al. (2013) but split into two groups: morality traits and cognitive ability traits.
37
38 The differentiation between morality and cognitive abilities was based on Nucci's (1984)
39
40 idea that morality traits are concerned with the impact on others and cognitive abilities
41
42 are concerned with the impact on the self. Consensual non-monogamy was described in
43
44 the study as morally neutral in its effect on others (in other words, the consensuality was
45
46 emphasized). Nevertheless, according to Haidt's (2001) theory that judgment about
47
48 wrongness of an act is a manifestation of deeply rooted social norms, we anticipated that
49
50 the ratings of moral traits would be affected more than the cognitive traits because people
51
52 see consensual non-monogamy as the performance of a morally relevant act. Therefore,
53
54
55
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

9

1
2
3 we hypothesized that the negativity displayed towards non-monogamy would be strong
4
5 on relationship relevant characteristics, and for the non-relational characteristics it would
6
7 be stronger for moral than for cognitive traits.
8
9

10
11 Finally, we were interested in exploring whether the individual characteristics of
12
13 the people making the judgments about consensual non-monogamy might have an impact
14
15 on their decisions. We focused on familiarity with consensual non-monogamy as the
16
17 factor most likely to have an impact on attitudes towards people in those types of
18
19 relationships. Our hypotheses were based on Allport's (1954) contact hypothesis which
20
21 states that as familiarity with an out group increases, so prejudice decreases. This was
22
23 demonstrated by Herek and Glunt (1993) who found that increased contact with gay men
24
25 reduced prejudice in heterosexual participants, and that contact predicted attitudes
26
27 towards this minority group better than any other demographic or psychological variable.
28
29 We predicted that increased familiarity would lead to more positive judgments of people
30
31 in consensually non-monogamous relationships. We identified two ways of testing this
32
33 hypothesis, by specifically asking people about their knowledge of consensual non-
34
35 monogamy and by asking if they were of a minority sexual orientation status, in other
36
37 words, if they were non-heterosexual. Heaphy, Donovan and Weeks (2004) argue that
38
39 because there is less recourse to culturally set models non-heterosexuals are free to invent
40
41 new ways of relating to each other. Barker and Ritchie (2007) concur and say that non-
42
43 heterosexuals are therefore more likely to have considered, and be familiar with,
44
45 consensual non-monogamy. Reinforcing the theoretical argument is research showing
46
47 that gay and bisexual individuals are more likely to be in consensually non-monogamous
48
49 relationships than people who identify as heterosexual (Solomon, Rothblum & Balsam,
50
51 2005; Blumstein & Schwartz, 1983). Thus we formulated our final hypotheses:
52
53
54
55
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

knowledge about consensual non-monogamy will mitigate negativity towards these relationship types, as will identifying as non-heterosexual.

Method

Participants

In total, 375 undergraduate participants took part, 247 from two Polish universities and 128 from a UK university. The sample consisted of 315 women and 60 men. The average age of participants was 21.61 ($SD = 3.09$). The majority of participants identified as heterosexual, 23 identified as gay, 19 as bisexual, and two people identified as pansexual, one person did not respond to this item.

Additional characteristics which were recorded included nationality, race, and religion; they had no effect on the dependant variable and so are not discussed in the results section but are reported here for completeness. The sample recruited in Britain was more diverse than the Polish participants who all identified as Polish and white. In the British sample 98 gave their nationality as British or English with the remainder coming from a variety of European, Asian or African countries. Eighty seven participants from Britain identified as white, 17 as black, 12 as mixed race and the remainder as of Asian origin. The majority of participants ($n = 237$) identified as Christian with the second largest group being atheist or no religion ($n = 70$).

Procedure and measures

The procedure was approved by the universities' ethics boards. The questionnaire was administered in either electronic or paper version, in Polish or English. Participants were asked to give their demographic information and then asked to give a short definition of three different types of consensual non-monogamy: polyamory, swinging, and open relationships with an option to check "I am not sure." These definitions were

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

11

1
2
3 scored by two independent raters, with 0 given for no response, 1 for an incorrect
4
5 response, 2 for a response that was nearly correct, and 3 for a definition which
6
7 encompassed the same ideas used in the present study and by Rubel and Bogaert (2014)
8
9 and Matsick et al. (2013) . Any discrepancies in scoring were discussed and agreed.
10
11 Scores were totalled across the three relationship styles to give a measure of the extent of
12
13 each participant's knowledge about consensual non-monogamy. Anyone scoring 0 to 4
14
15 was classified as "poor knowledge of consensual non-monogamy" ($n = 144$), anyone
16
17 scoring 5 or above was classified as "good knowledge of consensual non-monogamy" (n
18
19 = 231).
20
21
22
23

24
25 Five different hypothetical heterosexual couples were described in vignettes
26
27 which consisted of two parts. The first two or three sentences of each vignette gave a
28
29 brief introduction to the couple, for example: "Peter and Sarah have been together for 7
30
31 years. They met while studying and after 5 years they decided to get married. They like
32
33 being together, talking about current affairs and watching films." These general
34
35 descriptions were combined with a few sentences which described the couple's
36
37 relationship style (see Table 1). The relationship styles were similar to Conley et al.
38
39 (2013) but they were carefully designed so that the descriptions were comparable, a key
40
41 aspect being that the consensually non-monogamous relationships were all described as
42
43 taking that form since the start of the relationship. The combinations of introductions and
44
45 relationship style descriptions were counter-balanced and the order of presentation of the
46
47 vignettes was controlled, analyses revealed no order effects.
48
49
50
51

52
53 [INSERT TABLE 1 ABOUT HERE]
54

55
56 Participants were asked to rate each couple on 27 different characteristics, using a
57
58 scale from one to six where one was "the partners do not possess the trait" and six was
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

12

1
2
3 “the partners possess it to a large extent”. The 27 characteristics were grouped into three
4
5 sub-scales consisting of fifteen relationship satisfaction items, six cognitive abilities
6
7 items, and six morality items (see Table 2 for sample items). Three of the relationship
8
9 satisfaction items were reverse scored and then mean scores for each of the three
10
11 subscales were calculated.
12
13

14
15 [INSERT TABLE 2 ABOUT HERE]
16
17

18 Results

19
20 Ratings from 330 participants who identified as heterosexual ($n = 330$) were
21
22 contrasted with those from 44 participants who identified as a sexual minority (gay,
23
24 bisexual or pansexual). A $2 \times 2 \times 5$ MANOVA was performed with between subjects
25
26 factors of knowledge of consensual non-monogamy (poor/good), and sexual orientation
27
28 (heterosexual/minority), and a within subjects factor of relationship type (monogamous,
29
30 polyamorous, open, swinging, cheating). The three rating sub-scales (relationship
31
32 satisfaction, morality, cognitive abilities) were entered as dependent variables.
33
34
35

36
37 [INSERT TABLE 3 ABOUT HERE]
38

39
40 There was a highly significant effect of relationship type on overall scores (see
41
42 Table 3). Post hoc LSD tests revealed that on both the overall scores and on subscales,
43
44 ratings of the monogamous couple were significantly higher than ratings of the
45
46 polyamorous couple ($p < .001$). Ratings of the polyamorous couple were significantly
47
48 higher than ratings given to the couple in the open relationship and the swinging couple
49
50 (both $p < .001$), which were not significantly different from each other ($p = .129$). The
51
52 couple who cheated on each other was rated significantly lower than any other
53
54 relationship style ($p < .001$). As can be seen from Table 3, all three dependent variables
55
56 contributed significantly to the overall effect of relationship type, the strongest effect
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

13

1
2
3 being seen on ratings of morality, closely followed by ratings of relationship satisfaction.
4
5 Figure 1 shows the relative ratings of each relationship type, and also that ratings given to
6
7 the cheating couple, unlike the other four relationships, were lower for morality than
8
9 relationship satisfaction which was rated lower than cognitive abilities.
10
11

12 [INSERT FIGURE 1 ABOUT HERE]
13
14

15 Sexual identity appears to exert a stronger effect on perceptions of relationship
16
17 styles than knowledge of consensual non-monogamy. Knowledge about consensual non-
18
19 monogamy did not significantly interact with relationship type on any subscale or overall
20
21 but there was a highly significant interaction between sexual identity and relationship
22
23 type: subscripts in Table 4 demonstrate that the pattern of results was identical for all
24
25 three subscales and overall scores. Heterosexual participants rated people in
26
27 monogamous relationships highest, followed by polyamory, then open and swinging
28
29 couples who were rated equally, and cheating was rated lowest. In contrast, participants
30
31 who identified as gay, bisexual or pansexual rated the cheating couple lowest on all
32
33 category means but did not distinguish between the other four relationships. The
34
35 difference between minority and majority sexual identity groups was not explained by
36
37 differing knowledge about consensual non-monogamy as there was no significant
38
39 difference in the accuracy of their definitions, $t(372) = 0.57, p = .575, (M_{heterosexual} = 3.73,$
40
41 $M_{minority\ sexuality} = 3.98)$.
42
43
44
45
46
47

48 [INSERT TABLE 4 ABOUT HERE]
49
50

51 As to be expected, main effects of sexual identity group and consensual non-
52
53 monogamy knowledge were non-significant, as was the interaction between sexual
54
55 identity group and consensual non-monogamy knowledge, and the three way interaction
56
57
58
59
60

1
2
3 between relationship type, sexual identity group and consensual non-monogamy
4
5 knowledge.
6
7

8 **Discussion**

9
10 Our findings show that people who engage in monogamous relationships are
11 perceived more favorably than people in consensually non-monogamous relationships
12 and people who were described as having non-consensual sexual affairs. The negative
13 perceptions applied to relationship relevant characteristics as well as morality
14 characteristics and, to a lesser extent, descriptions of cognitive abilities. Even though
15 participants in the consensually non-monogamous relationships were clearly consenting
16 to the relationship structures, and were described as satisfied, people tended to judge non-
17 normative relationships negatively.
18
19

20 Our findings are consistent with Haidt's (2001) theory about intuitive moral
21 judgments being based on heuristics deduced from widespread social norms. Explaining
22 why heterosexual monogamy is normative is beyond the scope of this article but there are
23 numerous explanations from biological (e.g. Lovejoy, 1981; Jonason, Valentine & Li,
24 2012) to societal reasons (e.g. Low, 2003), including religious (e.g. Betzig, 1995) and
25 economic grounds (e.g. Betzig, 1992). It is clear that there is an association between the
26 norms that are violated by each relationship and the judgments made about each couple.
27 The cheating couple was judged to more harshly than the couples in the other
28 relationships and this is the relationship structure which violates the most norms.
29 Monogamy violates none of the norms identified and it was judged most positively.
30
31

32 The pattern of results from the consensually non-monogamous relationships
33 demonstrates that the norm of "no sex without love" is more influential than the norm
34 "only love one person". People in the polyamorous relationship, where emotional
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52

53 The pattern of results from the consensually non-monogamous relationships
54 demonstrates that the norm of "no sex without love" is more influential than the norm
55 "only love one person". People in the polyamorous relationship, where emotional
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

15

1
2
3 connections were a feature, were rated more positively than either swinging or open
4
5 relationship, where it was clear that the non-monogamous element of the relationship was
6
7 purely sexual. To some extent this mimics the findings of Matsick et al. (2013) who
8
9 looked at the three types of consensual non-monogamy and reported that polyamory was
10
11 perceived most favorably. In other words, our data is strongly supportive of their
12
13 hypothesis that it is sexual relations in the absence of emotions which is the strongest
14
15 cause of the devil effect. This finding is consistent with other research, for example
16
17 Hartnett, Mahoney, and Bernstein (1977) who found that falling in love mitigates the
18
19 negativity surrounding cheating. However, unlike our data, Matsick et al. found that
20
21 swinging was viewed as significantly worse than open relationships. The element of
22
23 swinging that they argue caused the negative judgments (i.e. that sex occurs without an
24
25 emotional component) is equally true of open relationships. Our data, showing no
26
27 difference between perceptions of people in swinging and open relationships, is more
28
29 consistent with the theoretical predictions which follow from considering norm violations
30
31 as the basis of prejudice, manifested by assigning negative attribution.

32
33
34 Matsick et al. (2013) did not include a cheating relationship style or a
35
36 monogamous relationship style in their procedure; by including the two comparison
37
38 groups our data points to some heartening information for people who practice
39
40 consensual non-monogamy, namely that the norm violation that produces the most
41
42 censure is not to do with emotional or sexual monogamy, but consensuality. It could be
43
44 said that there is more similarity between perceptions of monogamy and consensual non-
45
46 monogamy than there is difference. Inspection of mean values shows that participants
47
48 generally rated the couples in the four consensual relationship styles (i.e. monogamy,
49
50 polyamory, open relationships, and swinging) above or at the scale mid-point as opposed
51
52
53
54
55
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

16

1
2
3 to the cheating couple who were consistently negatively judged, with all their scores
4 below the mid-point. This suggests that although participants do draw a distinction
5 between relationships which are monogamous or not, and those that involve just sex or
6 also have an emotional component, the binary distinction which has the greatest effect on
7 attitudes is whether the protagonists are honest with each other and have made a
8 consensual decision about the nature of their relationship.
9

10
11
12
13
14
15
16
17
18 The results described above are representative of the heterosexual participants,
19 who formed the majority of the sample, but interestingly minority sexual orientation
20 participants did not distinguish between monogamy and consensual non-monogamy. The
21 cheating couple was assessed by minority sexual orientation participants in a similar way
22 to heterosexual participants: as less satisfied, less moral, and having poorer cognitive
23 skills. The data from the sexual minority group most clearly illustrates the binary
24 distinction we noted above, with consensual relationships on one side of the divide and
25 non-consensual relationships on the other. We hypothesize that this difference between
26 majority and minority sexual identity groups derives from the experiences the minority
27 sexual orientation participants have had in accepting and building their identities in a
28 heteronormative world. It seems logical that because gay, bisexual and pansexual
29 individuals have had experiences challenging assumptions of heteronormativity around
30 relationships so too they are more likely to be ready to challenge assumptions of
31 mononormativity (Pieper & Bauer, 2005); this is an area for further investigation.
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49

50
51 Participants classified as high or low in knowledge of consensual non-monogamy
52 did not perceive relationship styles differently to each other; this may be because we only
53 recorded knowledge of consensual non-monogamy, rather than feelings about consensual
54 non-monogamy. Our measure of familiarity conflates people who have positive
55
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

17

1
2
3 perceptions of consensual non-monogamy with those who have negative perceptions of
4 consensual non-monogamy. We interpreted knowledge of consensual non-monogamy as
5 an indicator of familiarity with the relationship structures, but intellectual knowledge and
6 personal understanding are different constructs. In other words, knowledge of consensual
7 non-monogamy is not a sufficient condition for a reduction of prejudice, rather the
8 tolerance displayed by the minority sexual orientation participants is as a result of
9 personal identification with alternative relationship structures. In future research it would
10 be interesting to investigate this further and determine whether exposure to consensually
11 non-monogamous individuals results in reduced attitudinal negativity.
12
13
14
15
16
17
18
19
20
21
22
23

24 Monogamy is not necessarily the most adaptive relationship model (Dow & Eff,
25 2013) but we are culturally taught to perceive it as the ideal and thus alternatives are
26 judged against it. The social intuitionist theory explains how we are able to make quick
27 evaluations about right and wrong and it also claims that those judgments are a tool for
28 maintaining social norms (Haidt, 2001). Moral judgments are not just an indicator of
29 social norms they are also an engine for social conformism because no one wants to be
30 the recipient of negative opinions. Prejudice towards consensual non-monogamy works
31 like a self-confirming rule where the intuitive judgments and others' opinions are
32 mutually strengthened. In that light we can hypothesize that people tend to see the non-
33 monogamous relationships negatively as it serves their initial negative moral judgment.
34 The perception of lower satisfaction or capabilities of people engaging in such relations
35 can be then construed as post-hoc rationalizations which help people to deal with the
36 dissonance resulting from the gap between a broken norm and no visible punishment
37 reflected in the stories. An additional study to ask people if they can articulate why
38 exactly they feel that consensual non-monogamy is wrong would be worth conducting.
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Limitations of the study

We said above that our conclusions could offer some encouragement to people engaged in consensual non-monogamy, in that our participants clearly took the consensual nature of the relationships into account when making attitudinal judgments. However, this comes with the caveat that our sample was comprised of undergraduate students in their early twenties, in other words it was not diverse or representative. Haidt (2012) reports that students give distinctively difference responses to other groups when asked to make morality judgments. Students tend to focus on the harm caused to others, whereas non-student participants tend to consider additional factors such as authority and normative behaviors. Thus, it may be the case that our sample could have judged the three consensually non-monogamous couples less negatively than a general population sample. Nevertheless, the fact that monogamy was still judged to be superior to consensual non-monogamy would be expected to be replicated. Further research with more diverse samples is certainly recommended.

The second limitation is theoretical in nature. The attitudes that have been studied in the present research differ from genuine discrimination and stigmatization (i.e. social exclusion or limited access). Stigmatization is not an inevitable consequence of prejudice, as the latter occurs at the individual level, while stigma is "socially shared knowledge about ... devalued status in society" (Herek, 2007, p. 906). In other words an individual's prejudice is not necessarily translated to a societal level. Research should explore this issue, by examining whether relational choices lead to devalued moral status and structural discrimination (Kleinman & Hall-Clifford, 2009).

Finally, following on from the second limitation the hypothetical nature of the vignette methodology needs to be examined. Our method is less abstract than that used

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

19

1
2
3 by Matsick et al. (2013) who asked participants to rate abstract descriptions of
4
5 relationships, they acknowledged that rating definitions of relationships might not be
6
7 comparable to rating specific individuals practicing those relationships. A more
8
9 ecologically valid methodology would be to flesh out the vignettes and make them as
10
11 realistic as possible, perhaps even employing video interviews.
12
13
14

Concluding remarks

15
16
17 This research helps us to understand the attitudes towards different non-normative
18
19 relationships, demonstrating that people who engage in monogamous relationships are
20
21 perceived more favourably than those who engage in consensual non-monogamy and
22
23 much more favourably than those who cheat. Investigating which social norms play the
24
25 biggest part in people's judgments may help prevent prejudice. This research helps us to
26
27 understand the sources of prejudice, especially the significance of socially shared norms
28
29 around morality. The results demonstrate that the inclusion of emotional connection
30
31 mitigates the negative assessment of consensual non-monogamy, in that polyamory is
32
33 perceived more favourably than open and swinging relationships. However, the gap
34
35 between perceptions of monogamy and consensual non-monogamy is not as extreme as
36
37 the gulf between perceptions of consensual relationships and cheating. It appears that the
38
39 consensual nature of consensual non-monogamy greatly softens judgements of people
40
41 engaging in these relationships.
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

References

- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA, USA: Perseus.
- Anderson, E. (2010). "At least with cheating there's an attempt at monogamy": Cheating and monogamism among undergraduate heterosexual men. *Journal of Social and Personal Relationships*, 27, 851-872. doi:10.1177/0265407510373908
- Barker, M. & Ritchie, A. (2007). Hot bi babes and feminist families: Polyamorous women speak out. *Lesbian and Gay Psychology Review*, 8, 147-157. Retrieved from <http://oro.open.ac.uk/id/eprint/17251>
- Barker, M. (2005). This is my partner and this is my . . . partner's partner: Constructing a polyamorous identity in a monogamous world. *Journal of Constructivist Psychology*, 18, 75-88. doi:10.1080/10720530590523107
- Barker, M., & Langdrige, D. (2010). Whatever happened to non-monogamies? Critical reflections on recent research and theory. *Sexualities*, 13, 748-772. doi:10.1177/1363460710384645
- Betzig L. (1995). Medieval monogamy. *Journal of Family History*, 20, 181-216. Retrieved from laurabetzig.org/pdf/JFH95.pdf
- Betzig, L. (1992). Roman monogamy. *Ethology and Sociobiology*, 13, 351-383. Retrieved from <http://deepblue.lib.umich.edu/bitstream/handle/2027.42/29876/0000226.pdf>
- Blaney, A. D., & Colleen Sinclair, H. (2013). Defining concepts and new directions: A commentary on "The fewer the merrier?: Assessing stigma surrounding nonnormative romantic relationships." *Analyses of Social Issues and Public Policy*, 13, 38-41. doi:10.1111/asap.12000

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

21

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Blumstein, P., & Schwartz, P. (1983). *American couples: Money-work-sex*. New York, USA: Anchor.
- Burris, C. T. (2013). Torn between two lovers? Lay perceptions of polyamorous individuals. *Psychology and Sexuality, 5*, 258-267.
doi:10.1080/19419899.2013.779311
- Conley, T. D., Moors, A. C., Matsick, J. L., & Ziegler, A. (2011). Prevalence of consensual non-monogamy in general samples. Unpublished data.
- Conley, T. D., Moors, A. C., Matsick, J. L., & Ziegler, A. (2013). The fewer the merrier?: Assessing stigma surrounding consensually non-monogamous romantic relationships. *Analyses of Social Issues And Public Policy, 13*, 1-30.
doi:10.1111/j.1530-2415.2012.01286.x
- Corn, D. (2012, January 5). Santorum and students clash on gay marriage. Retrieved from <http://www.motherjones.com>
- Day, M. V. (2013). Stigma, halo effects, and threats to ideology: Comment on the fewer the merrier? *Analyses of Social Issues and Public Policy, 13*, 49-51.
doi:10.1111/asap.12005
- Dovidio, J., Major, B., & Crocker, J. (2000). Stigma: Introduction and overview. In: T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (1–28). New York, USA: Guilford Press.
- Dow, M. M., & Eff, E. A. (2013). When one wife is enough: A cross-cultural study of the determinants of monogamy. *Journal of Social, Evolutionary, and Cultural Psychology, 7*, 211-238. doi:10.1037/h0099200

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

22

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, *108*, 814-834. doi:10.1037/0033-295X.108.4.814
- Haidt, J., Koller, S. H., & Dias, M. G. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology*, *65*, 613-28. Retrieved from www.ncbi.nlm.nih.gov/pubmed/8229648
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. New York: Pantheon.
- Haritaworn, J., Lin, C., & Klesse, C. (2006). Poly/logue: A critical introduction to polyamory. *Sexualities*, *9*, 515-529. doi:10.1177/1363460706069963
- Hartnett, J., Mahoney, J., & Bernstein, A. (1977). The errant spouse: A study in person perception. *Perceptual and Motor Skills*, *45*, 747-750. doi:10.2466/pms.1977.45.3.747
- Heaphy, B., Donovan, C., & Weeks, J. (2004). "A different affair? Openness and non-monogamy in same sex relationships." In J. Duncombe, K. Harrison, G. Allan, & D. Marsden (Eds.), *The state of affairs: Explorations in infidelity and commitment* (pp. 167-186). NJ, USA: Lawrence Erlbaum.
- Hegarty, P. (2013). Deconstructing the ideal of fidelity: A view from LGB psychology. *Analyses of Social Issues and Public Policy*, *13*, 31-33. doi:10.1111/j.1530-2415.2012
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not WEIRD. *Nature*, *466*, 29-29. doi:10.1038/466029a
- Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues*, *63*, 905-925. doi:10.1111/j.1540-4560.2007.00544.x

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

23

- 1
2
3 Herek, G. M., & Glunt, E. K. (1993). Interpersonal contact and heterosexuals' attitudes
4 toward gay men: Results from a national survey. *Journal of Sex Research, 30*,
5 239-244. doi:10.1080/00224499309551707
6
7
8
9
10 Jonason, P, Valentine, K. & Li, N. (2012). Human mating. In V.S. Ramachandran (Ed.),
11 *Encyclopedia of human behavior*, (2nd ed., pp. 371-377). Oxford, UK: OUP.
12
13
14 Kleinman, A., & Hall-Clifford, R. (2009). Stigma: a social, cultural and moral process.
15 *Journal of Epidemiology and Community Health, 63*(6), 418-419.
16
17
18
19 Klesse, K. (2006). Polyamory and its 'others': Contesting the terms of non-monogamy.
20 *Sexualities, 9*, 565-583. doi:10.1177/1363460706069986
21
22
23
24 Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*,
25 27, 363-385. doi:10.1146/annurev.soc.27.1.363
26
27
28
29 Lovejoy, C.O. (1981). The origin of man, *Science, 211*, 341-350.
30
31
32
33
34 Low B.S. (2003). Ecological and social complexities in human monogamy. In: U.
35 Reichard & C. Boesch (Eds.), *Monogamy: Mating strategies and partnerships in*
36 *birds, humans and other mammals* (p.161-176). New York: Cambridge
37
38
39
40
41
42
43
44 Martijn, C., Spears, R., Van der Pligt, J., & Jakobs, E. (1992). Negativity and positivity
45 effects in person perception and inference: Ability versus morality. *European*
46 *Journal of Social Psychology, 22*, 453-463. doi:10.1002/ejsp.2420220504
47
48
49
50
51 Matsick, J. L., Conley, T. D., Ziegler, A., Moors, A. C., & Rubin, J. D. (2013). Love and
52 sex: Polyamorous relationships are perceived more favorably than swinging and
53 open relationships. *Psychology & Sexuality, 5*, 339-348.
54
55
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

24

- 1
2
3 Medora, N. P., Larson, J. H., Hortaçsu, N., & Dave, P. (2002). Perceived attitudes
4
5 towards romanticism: A cross-cultural study of American, Asian-Indian, and
6
7 Turkish young adults. *Journal of Comparative Family Studies*, 33, 155-178.
8
9 Retrieved from jfi.sagepub.com/content/31/6/707.refs
10
11
12 Mitchell, M. E., Bartholomew, K. & Cobb, R.C. (2014). Need fulfillment in polyamorous
13
14 relationships. *Journal of Sex Research*, 51, 329-39.
15
16 doi:10.1080/00224499.2012.742998
17
18
19 Moors, A. C., Matsick, J. L., Ziegler, A., Rubin, J. D., & Conley, T. D. (2013). Stigma
20
21 toward individuals engaged in consensual nonmonogamy: Robust and worthy of
22
23 additional research. *Analyses of Social Issues and Public Policy*, 13, 52-69.
24
25 doi:10.1111/asap.12020
26
27
28 Nisbett, R. E., & Wilson, T. D. (1977). The halo effect: Evidence for unconscious
29
30 alteration of judgments. *Journal of Personality and Social Psychology*, 35, 250-
31
32 256. doi:10.1037/0022-3514.35.4.250
33
34
35
36 Nucci, L. (1981). Conceptions of personal issues: A domain distinct from moral or
37
38 societal concepts. *Child Development*, 52, 114-121. doi:10.2307/1129220
39
40
41 Page, E. H. (2004). Mental health services experiences of bisexual women and bisexual
42
43 men: An empirical study. *Journal of Bisexuality*, 4, 137-160.
44
45 doi:10.1300/J159v04n01_11
46
47
48 Peplau, L. A., Rubin, Z., & Hill, C. T. (1977). Sexual intimacy in dating relationships.
49
50 *Journal of Social Issues*, 33, 86-109. doi:10.1111/j.1540-4560.1977.tb02007.x
51
52
53 Pieper, M., & Bauer, R. (2005). Call for papers: International conference on polyamory
54
55 and mononormativity. Research centre for feminist, gender & queer studies,
56
57 University of Hamburg, November 5-6, 2005.
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

25

1
2
3 Rubel, A. N., & Bogaert, A. F. (2014). Consensual nonmonogamy: Psychological well-
4 being and relationship quality correlates. *Journal of Sex Research*, 4, 1-22.

5
6 doi:10.1080/00224499.2014.942722

7
8
9
10 Salvatore, J. (2013). Back to basics in the assessment of stigma: Commentary on Conley
11 et al. (2012). *Analyses of Social Issues and Public Policy*, 13, 45-48.

12
13 doi:10.1111/asap.12003

14
15 Sheff, E. (2011). Polyamorous families, same-sex marriage, and the slippery slope.

16
17 *Journal of Contemporary Ethnography*, 40, 487-520.

18
19 doi:10.1177/0891241611413578

20
21 Solomon, S.E., Rothblum, D. E., & Balsam, K. F. (2005). Money, housework, sex, and
22 conflict: Same-sex couples in civil unions, those not in civil unions, and
23 heterosexual married siblings. *Sex Roles*, 52, 561-575. doi:10.1007/s11199-005-

24
25 3725-7.

26
27
28
29
30
31
32
33
34 Thorndike, E. L. (1920). A constant error on psychological rating. *Journal of Applied*
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
Psychology, 4, 25-29.

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

1

Table 1

Descriptions of Each of the Five Relationship Styles Used in the Vignettes

Relationship style	Vignette description
Monogamy	Values of emotional and sexual loyalty are very important to them. They are faithful to each other and they plan to stay such for life.
Polyamory	From the very beginning they declared an interest in other, parallel relationships. Both she and he have their secondary partners, with whom they have romantic and sexual relationships. They meet together in a group quite often.
Open relationship	Before their marriage they decided to have an open relationship: he can meet other women, she can go out with other men. However they promised to be emotionally exclusive, so any contacts with lovers which can develop into more romantic feelings are immediately broken.
Swinging	They both consider themselves non-monogamous and they seek pleasure in sex-parties during which they swap partners. They do not have sexual contacts with others except at these parties. They also want to be emotionally exclusive.
Cheating	They both engage from time to time in short affairs, but because both of them want to maintain the marriage, they don't mention these liaisons to each other. Each of them supposes that revealing the truth would end their marriage.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

1

Table 2
Subscale Sample Items for Ratings Given to Relationships

Rating subscale	Sample items
Relationship satisfaction	Love each other. Have a satisfying sex life. Have quarrels (reversed).
Cognitive abilities	Are intelligent. Cope well in their life. Show presence of mind in difficult situations.
Morality	Are brave. Are trustworthy Behave appropriately.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

1

Table 3

MANOVA of relationship type, knowledge of consensual non-monogamy (CNM) and sexual identity on dependent variables.

Factor	Dependent variable	$F(1,369)$	p	partial η^2
Relationship type				
	Relationship satisfaction	138.88	< .001	.27
	Morality	156.04	< .001	.30
	Cognitive abilities	34.20	< .001	.09
	Overall	133.07	< .001	.27
CNM Knowledge				
	Relationship satisfaction	1.32	.262	.00
	Morality	3.14	.014	.01
	Cognitive abilities	2.37	.051	.01
	Overall	2.86	.023	.01
Sexual identity group				
	Relationship satisfaction	6.80	< .001	.02
	Morality	7.29	< .001	.02
	Cognitive abilities	7.05	< .001	.02
	Overall	9.19	< .001	.02
Relationship type \times CNM knowledge				
	Relationship satisfaction	.11	.743	.00
	Morality	.83	.362	.00
	Cognitive abilities	.74	.389	.00
	Overall	.32	.566	.00
Relationship type \times sexual identity group				
	Relationship satisfaction	10.03	.002	.03
	Morality	4.12	.043	.01
	Cognitive abilities	4.06	.045	.01
	Overall	7.45	.007	.02

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

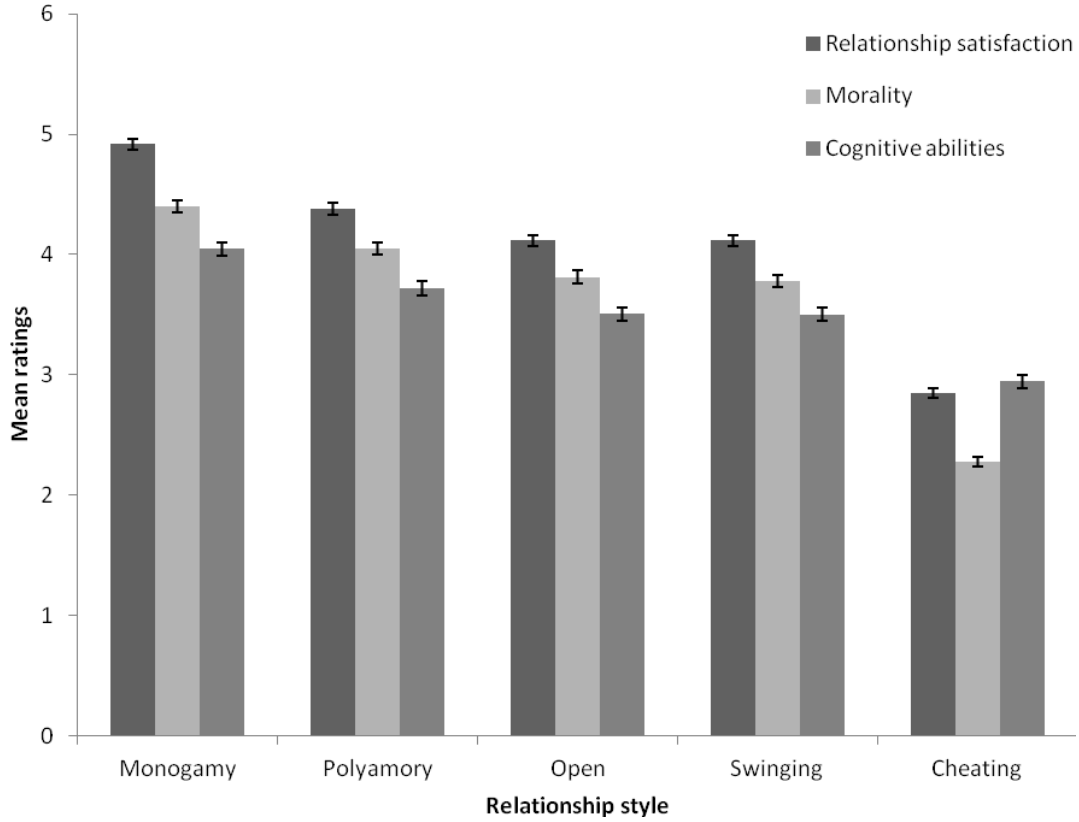


Figure 1. Mean ratings of relationship satisfaction, morality and cognitive abilities of people in five different relationship styles. Error bars indicate +/- 1SE.

ATTITUDES TOWARDS CONSENSUAL NON-MONOGAMIES

1

Table 4

Means (standard deviations), and post hoc analyses of ratings of relationship types by participant sexuality.

Items	Relationship type				
	Monogamy	Polyamory	Open	Swinging	Cheating
Relationship satisfaction items					
Heterosexual participants	4.96 (0.85) _a	4.35 (0.97) _b	4.10 (0.89) _c	4.07 (0.89) _c	2.83 (0.79) _d
Minority sexuality participants	4.60 (1.12) _a	4.58 (0.90) _a	4.24 (0.93) _a	4.48 (0.83) _a	3.00 (0.77) _b
Morality items					
Heterosexual participants	4.43 (0.99) _a	4.00 (0.98) _b	3.77 (1.02) _c	3.71 (0.97) _c	2.26 (0.77) _d
Minority sexuality participants	4.11 (1.15) _a	4.45 (0.99) _a	4.12 (1.13) _a	4.18 (1.04) _a	2.40 (0.92) _b
Cognitive abilities items					
Heterosexual participants	4.09 (1.06) _a	3.68 (1.06) _b	3.48 (1.08) _c	3.47 (1.06) _c	2.94 (1.02) _d
Minority sexuality participants	3.65 (1.21) _a	4.02 (1.32) _a	3.70 (1.24) _a	3.78 (1.15) _a	3.00 (1.10) _b
Overall					
Heterosexual participants	4.49 (0.84) _a	4.01 (0.89) _b	3.38 (0.88) _c	3.75 (0.86) _c	2.68 (0.73) _d
Minority sexuality participants	4.12 (1.06) _a	4.35 (0.94) _a	4.02 (0.99) _a	4.15 (0.90) _a	2.80 (0.82) _b

Note. Subscripts a to d indicate post hoc results conducted within participant sexuality groups. Means that do not differ significantly from each other ($\alpha=.001$) share subscripts; means that differ significantly from each other ($p<.001$) do not share subscripts. Subscript 'a' denotes items with the highest means, subscript 'b' denotes items with next highest means etc.