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Full Length Research Paper

Sexual attitudes among Mozambican adults

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This study examined the sexual attitudes of Mozambican adults. A total of 301 participants, aged 18 to 41 years (154 males and 147 females), living in the area of Maputo, were presented with the Portuguese version of the sexual attitude scale devised by Hendrick and Hendrick (1987). Data were analyzed using factorial analyses, ANOVA and correlation coefficients. A structure of seven factors was found (pleasure/premarital sex, responsibility, no-normative sex, awareness of risks, permissiveness, communion, and instrumentality). The results of ANOVA and correlation coefficients show that, in general, the participants agreed with the idea that sex may be a responsible practice and were in complete disagreement with the idea that everything in sexual relationships was permissible. They were clearly aware of the risk associated with unprotected sex and were neither favorable nor hostiles to anal or oral sex. Female and religious participants were less permissive and less instrumental than their male and nonreligious counterparts.

Key words: Attitude, permissiveness, responsibility, risk, sex.

INTRODUCTION

Sexual attitudes have been extensively studied among adolescents and adults (Oliver and Hyde, 1993). Studies have been conducted also on attitudes to sexual practices (Bryan et al., 1999), sexual permissiveness (Crawford and Popp, 2003), and sexual desire (Regan, 1998).

Most of the studies to date have been conducted on American and Canadian samples. But several studies have also examined the role of ethnicity on sexual attitudes (Kaufman et al., 1996; Meston et al., 1998; Ng and Lau, 1990; Sachdev, 1998). Marin and Marin (1992) showed that Hispanic women living in the US had more negative attitudes towards sexual permissiveness than the American women in general. Meston et al. (1996) showed that Canadian students from Asian ancestry had more negative attitudes towards some sexual behaviors (for example, masturbation) than Canadian students from European ancestry.

Weinberg et al. (1995, 2000) showed that Swedish students were clearly more sexually permissive than American students. Le Gall et al. (2002) showed that French young adults were more permissive, more instrumentalist, and less interested in communion than American young students. With regard to pleasure, however, they found only minimal differences.

Finally, comparing African and Western Europe samples, Vera and Mullet (2010) showed that African adults are less permissive than Western European adults. Vera and Mullet (2011) also showed, for example, that the Mozambican adults' sexual responsibility attitudes were not significantly different from the French adults' sexual responsibility attitudes.

The present study

The present study was aimed at examining the sexual attitudes among Mozambican adults using the sexual attitude scale (Hendrick and Hendrick, 1987). The sexual attitudes scale is one of the most complete instruments for studying sexual attitudes. It is 5-points disagree-agree scale divided into four subscales entitled: Permissiveness, Sexual Practices, Instrumentality, and Communion.

Using this instrument, Hendrick and Hendrick (1995) showed that American people, in general, were not very

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permissive at that moment. Typical permissiveness items were “I would like to have sex with many partners” and “Casual sex is acceptable.” The mean response observed to such items was about 2 points; that is, the mean response was closer to the ‘disagree’ pole of the scale than to the ‘agree’ pole. Hendrick and Hendrick (1995) showed that females tend to be less permissive than males. But this difference observed between females and males was approximately one point.

Hendrick and Hendrick (1995) also showed that American people in general, were moderately instrumental (considerer that sexuality is a physical function like others). Typical instrumentalist items were “Sex is primarily a bodily function, like eating” and “Sex is primarily physical.” The mean response observed to such items was 2.50, which was closer to the disagree pole than to the agree pole, although it was higher than that observed for permissiveness. With regard to the sexual practices and communion, people were much more in agreement with the items proposed. Typical sexual practices items were “A man should share responsibility for birth control” and “Sex education is important for young people.” Typical communion items were “A sexual encounter between two people deeply in love is the ultimate human interaction” and “At its best, sex seems to be the merging of two souls.” In both cases, the mean responses were close to 4.0, which correspond to agree pole.

Le Gall et al. (2002) re-examined the factorial structure of the Hendrick and Hendrick sexual attitude scale using a confirmatory approach. They identified 5 factors (permissiveness, responsibility, pleasure, instrumentality, and communion) and showed that, for example, the French young adults were more permissive, more instrumentalist, and less interested in communion than American young students. With regard to pleasure, however, they found only minimal differences.

Thus, as the two previous studies above, we used the same scale to examining sexual attitudes in Mozambique. Mozambique is a country located in Austral Africa. It is considered as a very collectivistic country (Hofstede, 2009). Men are traditionally brought up to be sexually free. As homosexuality is highly stigmatized, men are expected to demonstrate “virility” by having sex with as many women as possible (Vera and Mullet, 2010). By contrast, women are bought up to be sexually restrictive. They are expected to become, and remain, honorable housewives, and to let their partner decide on sexual matters (Vera and Mullet, 2010).

Examining sexual attitudes in African countries is not just interesting from a theoretical viewpoint. It is also important for social reasons: (a) sexual attitudes have been seen to be positively associated with sexual behaviors (Delamater and Moorman, 2007); and (b) the risk of contracting sexually transmitted disease depends on sexual behavior (Pearson et al., 2009). In a country such as Mozambique, where adults HIV prevalence is higher than 15% (compared to about 0.3% in Western Europe), information about sexual attitudes may be of great practical value (Vera and Mullet, 2011).

The following three main research questions guided the study: (a) which structure best characterizes the Mozambican adults’ attitudes about sex? Is the five-factor structure identified on a sample of Western Europe adults (Le Gall et al., 2002; Vera and Mullet, 2010) - permissiveness, responsibility, pleasure, instrumentality, and communion – is capable of accurately accounting for data gathered on Mozambican adults? (b) What are the Mozambican adults’ attitudes with regard to sexual permissiveness, sexual instrumentality, no-normative sex, sexual responsibility, sexual communion and sexual risk behavior? (c) What are the personal characteristics that determine sexual attitudes among the Mozambican adults?

Our hypothesis is that in Mozambican sample we will find different sexual attitudes factorial structure than those found in Western Europe. We also expect that the Mozambican adults will have higher score on awareness of risk and sexual responsibility factors and lower score on no-normative sex and permissiveness factors.

Our hypothesis is based on the consideration that sexual attitudes in Mozambican are influenced by the fact that people are living in society that it is largely collectivistic and traditional within which the sexuality of invidious suffers more regulation and a stricter control than in individualistic and modern western-type societies (Vera, 2007). We also think that, although in Mozambique men are traditionally brought up to be sexually free, the high adults HIV prevalence rate influence people in direction of more sexual responsibility attitudes and less sexual permissiveness attitudes.

METHODS

Participants

The sample was composed of 301 Mozambican adults aged 18 to 41 years (M = 26.5; SD = 8.26; 154 males and 147 females). Further, 62% of the participants were single, 6% lived with a sexual partner, 30% were married, and 2% were widowed. Also, 51% of the participants declared themselves to be currently in love. The number of times the participants declared to have been in love was mostly 1 (89 participants), closely followed by 2 (81 participants).

Furthermore, 17% of the participants had completed primary school, 61% had attended secondary school, 15% had a high-school degree, and 7% had a university degree; 49% declared that they attended church, temple, or mosque on a regular basis, and 32% declared themselves as believers, but did not attend church, temple, or mosque on a regular basis. Also, 54% of the participants declared that they were Roman Catholics, 29% declared that they were Protestants, 7% declared that they were Muslims, and 3% declared that they were Zionist (a religion that syncretizes Animism and Christianity).

Instrument

The instrument used was the Portuguese version of the sexual attitude scale devised by Hendrick and Hendrick (1987).

In designing this version, the authors followed the guidelines translation proposed in the literature on cross-cultural methodology (Brislin, 2000): Independent/blind/back translation, educated translation, and small-scale pretests. An English-Portuguese translation was executed by a bilingual translator (Portuguese–English) and then sent to another translator for back-translation. The Portuguese version was also compared with the French version.

Our instrument was also composed of (a) the Portuguese adaptation of the life satisfaction scale (Neto, 1993), (b) the Portuguese version of the religiousness questionnaire (Hoge, 1972), (c) a short personality questionnaire, and composed of (d) five items extracted from the big five questionnaire (Goldberg, 1990) to characterize the participants personalities between five possibilities: open (Openness factor), lonely (Introversion factor), agitated (Neuroticism factor), methodical (Conscientiousness factor), and agreeable factors (Agreeableness factor).

Procedure

The participants were contacted in the streets of Maputo. The people approached were told that the research team was conducting a survey on sexual attitudes, and they were given some examples of the questions or shown the first page of the questionnaire. The people that consented to participate in the research were told to come to Eduardo Mondlane University for fill the questionnaire. The acceptance rate was high: 60% of the people contacted consented to participate in the study.

At Eduardo Momdlane University, the purpose of the study was individually explained to the participants. Following this explanation, the participants individually answered the questionnaires in a quiet room, most often in the absence of the researcher. The total time required to complete the questionnaires was about 35 min. Research was conducted in 2010 and 2011.

The participants were all non-paid volunteers. To guarantee the confidentiality of the information given by participants, the questionnaire was anonymous and all participants were told that it was not imperative to disclose their name or some other personal identification on it.

RESULTS

First confirmatory factor analyses

A first confirmatory factor analysis was conducted on the data from the sexual attitudes scale using the model proposed by Le Gall et al. (2002). This comprised five correlated factors: permissiveness (6 items), responsibility (4 items), pleasure (4 items), communion (4 items), and instrumentality (4 items). The overall goodness of fit for this model was not very high. The value of the GFI index was 0.88, that of the CFI index was 0.67, and the RMR value was 0.08. Four path coefficients were not significant at $p < 0.01$.

Subsequent exploratory factor analyses

Considering the mediocre fit of the correlated five-factor model, an exploratory factor analysis was conducted on the whole sample, using all the sexual attitudes items included in the study. Based on the scree test, a 7-factor orthogonal solution was chosen (Table 1). Principal components analyses were followed by VARIMAX rotation. All the factors had eigenvalues greater than 1 and loaded more than three items.

The first factor was ‘pleasure/premarital sex’. It accounted for 8% of the total variance. It was loaded by items such as “sex is best when you let yourself go and focus on your own pleasure” and “sexual experience before marriage is ok.” The second factor was ‘responsibility’. It accounted for 7% of the total variance. It was loaded by items such as “birth control is part of responsible sexuality” and “A man should share responsibility for birth control.”

The third factor was ‘no-normative sex’. It accounted for 6% of the total variance. It was loaded by items such as “oral sex is ok” and “anal sex is ok.” The fourth factor was ‘awareness of risks’. It accounted for 5% of the total variance. It was loaded by items such as “after having had sex with a risky partner, one may feel guilty” and “a non-protected relationship is more pleasurable than a protected relationship.”

The sixth factor was ‘Permissiveness’. It accounted for 8% of the total variance. It was loaded by items such as “I would like to have sex with many partners” and “it is ok to have ongoing sexual relationships with more than one person at a time.” These items were also categorized as permissiveness items in most of the previous studies. The fifth factor was ‘Communion’. It accounted for 6% of the total variance. It was loaded by items such as “a sexual encounter between two people deeply in love is the ultimate human interaction” and “sex is the closest form of communication between two people”.

Finally, the seventh factor was ‘Instrumentality’. It accounted for 6% of the total variance. It was loaded by items such as “sex as a simple exchange of favor is ok if both people agree to it” and “sex for its own sake is perfectly all right”.

Correlation with participants’ characteristics

Table 2 shows the correlation coefficients between the 7 factors and the participants’ characteristics. A series of 7 regression analyses were conducted with each of the 7 factors as the criteria, and gender, age, educational level, currently in love, risky sexual behavior (unprotected sexual relationships), religious involvement (from nonbeliever in God to regular attendee), intrinsic religiousness (religion as a means - Hoge, 1972), and extrinsic religiousness (religion as an end - Hoge, 1972) as the predictors. The choice of these predictors was made as some studies (Hendrick and Hendrick, 1995; Le gall et al., 2002) showed that there are able to influence people’s sexual attitudes.

With regard to permissiveness, a combination of 5 predictors explained 21% of the variance (F (5,295) =

Table 1. Results of the exploratory factor analysis (mean values).

Items	Factors							
	I	II	III	IV	V	VI	VII	*M*
It is OK to manipulate someone into having sex as long as no future promises are made.	0.46	0.06	0.10	0.02	−0.04	−0.02	0.21	3.34
Sex is best when you let yourself go and focus on your own pleasure.	0.62	−0.03	0.05	0.11	−0.12	−0.06	0.11	4.05
Sexual experience before marriage is OK.	0.64	0.05	0.19	−0.05	0.29	-0.00	0.10	3.07
Sex is usually an intensive, almost overwhelming experience.	0.49	0.19	−0.01	0.05	0.12	0.19	0.05	3.52
Extensive premarital sexual experience is fine.	0.61	−0.02	0.16	0.02	0.17	0.13	−0.05	3.25
Extramarital affairs are all right as long as one's partner doesn't know about them.	0.46	0.03	−0.27	−0.16	0.20	0.29	0.07	2.38
Casual sex is acceptable.	0.47	−0.16	0.03	0.04	0.46	0.14	0.03	2.66
A woman should share responsibility for birth control with her partner.	−0.07	0.66	0.01	0.13	-0.00	0.13	0.02	4.65
Birth control is part of responsible sexuality.	0.01	0.78	0.01	−0.13	0.01	−0.09	0.08	4.11
Sex education (at school) is important for young people.	0.08	0.85	−0.01	0.19	−0.02	0.02	−0.04	4.57
A man should share responsibility for birth control with his partner.	0.21	0.60	0.06	0.06	−0.21	0.00	−0.29	4.59
Unprotected sex is more exciting than protected sex.	0.21	−0.07	−0.45	−0.30	0.22	0.15	0.16	2.96
Oral sex is OK.	0.22	0.08	0.62	−0.14	0.07	−0.15	0.16	3.12
Anal sex is OK.	0.16	0.04	0.58	−0.21	0.15	0.01	0.29	2.53
Homosexuality is OK.	0.04	−0.07	0.63	0.13	−0.00	0.10	−0.06	1.99
Prostitution should be accepted by society.	0.26	0.04	0.46	0.00	0.23	0.25	−0.01	2.35
A non-protected relationship is more pleasurable than a protected relationship.	0.18	−0.17	−0.31	−0.40	0.04	−0.07	0.32	2.41
After having had risky sex with a partner, one may feel guilty.	0.03	0.15	0.03	0.67	0.08	−0.10	−0.05	4.16
After having had sex with a risky partner, one may feel frightened.	0.13	−0.02	−0.10	0.69	−0.11	0.01	0.17	4.38
Sex is more fun with someone you don't love.	0.08	−0.19	0.10	−0.23	0.44	0.01	−0.17	1.49
It is OK to have ongoing sexual relationships with more than one person at a time.	0.25	0.18	0.03	−0.05	0.61	0.13	0.16	1.84
I would like to have sex with many partners.	0.13	−0.06	−0.04	0.01	0.67	0.09	0.16	1.87
People should at least be friends before they have sex together.	0.30	0.15	−0.29	0.07	−0.53	0.27	−0.02	4.29
During a sexual relationship, oral contraceptives and condoms are complementary and necessary.	0.23	0.34	0.08	0.29	−0.50	0.12	−0.13	4.39
One-night stands are sometimes very enjoyable.	0.15	0.17	−0.02	0.33	0.50	0.21	0.06	3.41
It is possible to enjoy sex with a person and not like that person very much.	0.13	0.01	0.27	0.31	0.47	−0.12	0.23	3.45
Orgasm is the greatest experience in the world.	0.21	0.04	0.11	0.18	−0.01	0.55	−0.08	3.42

Table 1. Contd.

Life without sex would be very dull.	0.18	0.17	−0.01	−0.10	0.17	0.56	0.17	3.47
A sexual encounter between two people deeply in love is the ultimate human interaction.	0.04	0.01	−0.10	−0.25	−0.05	0.67	0.08	3.15
Sex is the closest form of communication between two persons.	−0.12	−0.07	0.08	0.01	0.02	0.65	0.10	2.87
Sex is better when considered as a way for relaxing.	0.25	−0.04	-0.09	0.18	0.15	0.41	0.39	3.02
Sex is primarily the taking of pleasure from another person.	0.01	−0.00	0.18	−0.01	−0.03	0.15	0.57	2.08
Sex as a simple exchange of favor is OK if both people agree to it.	0.03	0.09	−0.09	0.01	0.25	0.05	0.63	2.61
Sex for its own sake is perfectly all right.	0.14	−0.07	0.11	−0.02	0.23	0.01	0.64	2.68
The main purpose of sex is to enjoy oneself.	0.29	−0.20	−0.09	0.11	−0.19	0.12	0.51	2.30
Variance explained.	2.87	2.61	2.06	1.87	2.80	2.19	2.18	
Percent of explained variance.	0.08	0.07	0.06	0.05	0.08	0.06	0.06	
Alpha values.	0.70	0.75	0.63	0.47	0.70	0.61	0.60	
Mean.	3.27	4.48	2.60	4.05	2.26	3.23	2.42	

15.76, $p < 0.001$). These predictors were gender (Beta = −0.30, $p < 0.001$), intrinsic religiousness (Beta = −0.25, $p < 0.001$), educational level (Beta = 0.14, $p < 0.01$), current love (Beta = −0.13, $p < 0.02$), and risky sexual behavior (Beta = 0.12, $p < 0.02$). With regard to responsibility, a combination of three predictors explained 7% of the variance (F (5.297) = 7.11, $p < 0.001$). These predictors were educational level (Beta = 0.17, $p < 0.01$), risky sexual behavior (Beta = −0.12, $p < 0.02$), and current love (Beta = 0.13, $p < 0.05$).

With regard to awareness of risk, a combination of 2 predictors explained 5% of the variance (F (5.298) = 5.36, $p < 0.01$). These predictors were educational level (Beta = 0.17, $p < 0.01$) and risky sexual behavior (Beta = −0.14, $p < 0.02$). With regard to instrumentality, a combination of 2 predictors explained 5% of the variance (F (5.298) = 8.15, $p < 0.001$). These predictors were gender (Beta = −0.19, $p < 0.001$) and current love (Beta = −0.13, $p < 0.05$). With regard to pleasure/premarital sex, a combination of 2 predictors explained 7% of the variance (F (5.298) = 11.87, $p < 0.001$). These predictors were gender (Beta = −0.24, $p < 0.001$) and educational level (Beta = 0.14, $p < 0.02$).

With regard to communion, a combination of 2 predictors explained 6% of the variance (F (5,298) = 9.68, $p < 0.01$). These predictors were extrinsic religiousness (Beta = 0.19, $p < 0.001$) and age (Beta = 0.13, $p < 0.05$). Finally, with regard to no-normative attitudes, a combination of 5 predictors explained 17% of the variance (F (5.295) = 12.06, $p < 0.001$). These predictors were educational level (Beta = 0.20, $p < 0.001$), religious intrinsic (Beta = −0.20, $p < 0.001$), religious extrinsic (Beta = 0.17, $p < 0.01$), religious involvement (Beta = −0.15, $p < 0.01$), and age (Beta = −0.11, $p < 0.05$).

DISCUSSION

The present study examined the sexual attitudes on a sample of Mozambican adults. One research question that guided the study was: Which structure best characterizes the Mozambican adults' attitudes about sex? It was shown that the five-factor structure identified by Le Gall et al. (2002) and Vera and Mullet (2010) was not able to report the data gathered on a Mozambican sample. Although, the fit of the five-factor model was not extremely poor, it was not good enough for considering that this model correctly fit the

Table 2. Correlation coefficients between the 7 factors, the characteristics of the participants, and their personality traits.

Variables	Factors						
	Perm.	**Resp.**	**Risk**	**Instr.**	**Pleas.**	**Com.**	**Norm.**
Gender	−0.31**	0.06	0.06	−0.19**	−0.23**	−0.10	−0.04
Age	0.02	0.08	−0.05	−0.03	−0.01	0.16**	−0.06
Education	0.18**	0.14	0.12	−0.12	0.16*	0.15	0.28**
Religious involvement	−0.18**	−0.02	0.06	−0.10	−0.07	−0.05	−0.18**
Currently in love	−0.12	0.14	−0.06	−0.13	−0.01	−0.04	−0.09
Risk sexual behavior	0.03	0.05	0.16**	−0.10	0.18**	0.06	0.03
Age at the time of the first relationship	−0.27**	−0.04	−0.07	−0.02	−0.22**	0.04	−0.10
Number of partners in your life	0.24**	0.05	0.16	0.10	0.22**	0.16	0.12
Frequency of relationships	0.05	−0.02	0.09	−0.05	0.19**	0.07	0.04
Satisfaction as regards frequency of relationships	−0.18**	−0.06	−0.13	−0.13	−0.04	0.02	−0.19**
Personality traits							
Openness (set in one's ways)	0.12	0.22*	−0.24*	−0.04	−0.14	0.21*	0.00
Introversion (lonely)	−0.07	−0.16	0.07	−0.02	−0.07	−0.19	0.15
Neuroticism (agitated)	−0.16	−0.03	0.26*	−0.09	−0.00	−0.12	0.01
Conscientiousness (methodical)	−0.20	0.03	−0.06	−0.05	−0.00	0.08	0.07
Agreeableness (agreeable)	0.37*	−0.09	−0.11	−0.03	0.05	0.02	−0.12
Intrinsic religiousness (hoge scale)	−0.28**	0.05	−0.02	−0.07	−0.03	−0.04	−0.28**
Extrinsic religiousness (hoge scale)	0.13	0.09	0.07	0.01	0.16	0.21**	0.24**

Note: * = $p < 0.05$, ** = $p < 0.01$.

data. An exploratory factor analysis conducted on the scale found 7 factors. Five of them were close in meaning to those found in Western Europe adults (Le Gall et al., 2002; Vera and Mullet, 2010), but the items that loaded on these factors were not always exactly the same items. Two additional factors were found: 'awareness of risks' and 'No-normative sex'. This result is in agreement with our theoretical hypothesis. This result seems to indicate that traditional sexual standard about what should be the normal sexual practices and the high adults HIV prevalence rate (more than 15%) influence people sexual attitudes as we envisaged.

The second research question was: What is the Mozambican adult's attitude with regard to sexual permissiveness, sexual instrumentality, no-normative sex, sexual responsibility, sexual communion and sexual risk behavior?

Factor scores computed on the 7 factors evidenced ranged from 2.26 to 4.48 (on a 5-points disagree-agree scale). The highest agreement score was for the responsibility factor (4.50 points); that is, Mozambican adults were practically in total agreement with the idea that birth control is a part of responsible sexuality, and that the man should share the responsibility for this with his partner. This result is consistent with our hypothesis and completely consistent with the findings by Hendrick and Hendrick (1995) on the American samples and to a lesser extent with the findings on the European samples (Le Gall et al., 2002; Vera and Mullet, 2010).

The second highest agreement score was for the awareness of risk factor (4 points); that is, Mozambican adults agreed with the idea that after having had sex with a risky partner, one may feel frightened. Overall, the participants were also in agreement with the pleasure/premarital sex items (3.50 point); that is, Mozambican adults somewhat agreed with the idea that sexual experience before marriage is ok, and that sex is best when one focuses on one's pleasure. This result is also consistent with our hypothesis. However, the items based on the pleasure/premarital sex factor were different from those that were based on the pleasure factor finding on the European samples (Le Gall et al., 2002; Vera and Mullet, 2010), which made direct comparisons difficult.

With regard to communion items, responses were more neutral (2.40 points); that is, Mozambican adults neither agreed nor disagreed with the ideas that sex is the closest form of communication between two people, and that life without sex would be very dull. This result was consistent with the findings by Le Gall et al. (2002). With regard to no-normative sex items, the responses were also neutral, but somewhat in disagreement (about 2.45 points); that is, Mozambican adults were neither strongly favorable nor hostile to oral or anal sex. As we expected that Mozambican will be very hostile to no-normative sex, this result is not in agreement with our assumption. It

seems that Mozambican adults, at least, are starting to nuance traditional point of view in this matter.

The highest disagreement score was for the permissiveness factor (about 2 points); that is, Mozambican adults disagreed with the ideas that it is ok to have ongoing sexual relationships with more than one person at a time, and that sex is more fun with someone one does not like. This result was consistent with the findings by Hendrick and Hendrick (1995) in that permissiveness score was also the lowest one in their study. This result was, however, clearly not consistent with the findings on the European samples (Le Gall et al., 2002; Vera and Mullet, 2010): In the French sample, for example, the permissiveness score was about one point higher.

The second highest disagreement score was for the instrumentality factor (about 2.30 points); that is, Mozambican adults somewhat disagreed with the ideas that sex as a simple exchange of favor is ok if both the people agree to it and that the main purpose of sex is to enjoy oneself. This result was consistent with those findings by Hendrick and Hendrick (1995) as well as Le Gall et al. (2002) and Vera and Mullet (2010).

The third research question was: What are the personal characteristics that determine the sexual attitudes among the Mozambican adults? Among these seven dimensions of attitudes and the participants' characteristics, a complex but easily understandable pattern of associations was extracted. Permissive participants were more frequently males who were not intrinsically religious, who were highly educated, not currently in love, and who sometimes behaved in a risky way (unprotected sex). Also, these permissive participants had experienced sex early, have had many partners, and tended not to be satisfied with the current frequency of their sexual relationships. The negative association with religiosity has already been widely documented in the literature (Lottes et al., 1993; Nicholas and Durrheim, 1995; Pluhar et al., 1998; Sheeran et al., 1993; Zaleski and Schiaffino, 2000). Interestingly, permissiveness was positively associated with agreeableness.

Responsible participants were more frequently highly educated, currently in love, and tended not to behave in a risky way; the score on this factor was also, to a limited extent, negatively related to openness. In the same way, participants who were aware of the risk were more often highly educated and tended not to behave in a risky way. Interestingly, the score on this factor was positively related to openness and neuroticism.

Instrumental participants were more often males who were not currently in love. Participants who considered sex as essentially a major source of pleasure were more frequently highly educated males. Also, these participants had experienced sex early, have had many partners, and tended to experience sex with a high frequency. Participants who considered sex as essentially an opportunity of communion between persons were more frequently aged, extrinsically religious ones. Communion was also negatively associated with openness. Finally, participants who were favorable to no-normative sex were more often highly educated ones who were extrinsically, religious, and who did not attend church on a regular basis.

In summary, Mozambican adults, similar to American and European adults agreed with the idea that sex may be a responsible practice, and, more than their European counterparts, disagreed with the idea that everything in sexual relationships (for example, having more than one partner at a time) was permissible. They were clearly aware of the risk associated with unprotected sex, and were neither strongly favorable nor hostile to anal or oral sex. Female and religious Mozambicans were less permissive and less instrumental than their male and nonreligious counterparts, similar to the American or European females and religious people.

Thus, the results of this study show that there is a difference between the Mozambican and Western European sexual attitudes. But this difference is not larger. The results suggest also that even if the adults HIV prevalence rate is still higher in Mozambique (more than 15%), the campaigns against HIV/AIDs in Mozambique are pushing peoples to indorse more sexual responsible attitudes and less permissive attitudes. In that, we can say that the results of this study are relevant and we can expect that these changes of attitudes, in medium-term, will turn into significantly less sexual risk behavior.

LIMITATION

Hendrick and Hendrick (1987), Le Gall et al. (2002), and Vera and Mullet (2010) studied sexual attitudes without taking in account some other important elements of sexuality that can explain sexual attitudes such as sexual education, economic and social life conditions, and gender relationship. Thus, the findings interpretation is limited. Future work on sexual attitudes among Africans should analyze closely the correlation between sexual attitudes and sexual behavior, people sexual education, gender relationship, economic and social life conditions.

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