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Cultural Frames of Deviance. Muslim Religiousness and Adolescents' Attitudes Toward Violent Control of Female Behavior

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ABSTRACT

Using a survey of a culturally and religiously diverse students in Germany, we investigate the influence of Muslim religiousness on violence-accepting gender role orientations. We argue that the religious frame of "fornication" (*zinā*) defines deviance and refers to a cultural frame of order between and within clans in non-state societies, namely the "culture of honor." Muslim religiousness has a robust effect on violence-accepting gender role orientations, controlling for culture of honor and confounders. Results of cross-level interactions indicate a social influence on these attitudes, which we interpret as a *social proof* mechanism: the higher the share of religious Muslims in a school class-context, the higher the acceptance of violent-accepting attitudes. We also show that Muslim religiousness tends to increase the accordance with violent control of females within the family. We argue that according to the religious-cultural frame of a divine order, *zinā* is interpreted as a violation of a sacred norm and thus as deviant.

Introduction

Cultural diversity is an enrichment for societies and a potential source of cultural variation and social innovation. As soon as diversity implies divergent moral concepts, however, it can produce tensions between cultural groups, in particular if these groups prefer different values, normative goals, and different moralities (Haidt 2012). Comparative value research has shown that the support for democratic regimes varies considerably around the world. On average, it is strong in the Western world and weaker in Islamic countries (Brunkert, Kruse, and Welzel 2018). Support for patriarchal values is widespread among Muslims who live in predominantly Muslim countries, and is similarly increased among Muslims who live in non-Muslim countries (Alexander and Welzel 2011:52). Although immigrants do not represent value orientations of their countries of origin, there are average differences between Muslim minorities and non-Muslim majorities with respect to gender role orientations, given an extensive set of relevant control variables (Alexander and Welzel 2011:60). Accordingly, if values and gender role orientations vary by cultural origin and religion, there might be also different cultural frames of norms and deviance. Practices and norms of sanctioning deviant behavior may be influenced by culture and religion.

In our study, we investigate the influence of Muslim religiousness on violence-accepting gender role orientations among German adolescents. For this purpose, we follow the approach of Alexander and Welzel (2011) who adjusted the effect of Muslim belief by a large set of confounders. We assume that as these gender role orientations increase, the more religious Muslim adolescents are exposed to potential contact with other religious Muslim adolescents.

Although quantitative-empirical studies on the integration of adolescent Muslims exist (Wetzels and Brettfeld 2003), evidence is lacking about the content of culture and religious beliefs, as well as systematic distinguishment between Muslim religiousness and the "culture of honor" (Windzio and Wingens 2014; Leszczensky 2018). We describe how agreement with violent control of female behavior is related to cultural and religious frames prevalent in clan structures and societies with high kinship intensity. Globally and historically, a high degree of kinship intensity was a prevalent phenomenon. However, it has been repressed due to the emergence of modernity, rationalization, and individualization, particularly in the Western world (Weber 1972).

Schulz et al. (2019) argue that Western culture evolved toward individualistic values and appreciation of personal autonomy due to enduring exposure to the influence of the Western Church and its family and marriage policies. Religion itself does not cause patriarchal values, but it does encourage traditional, pre-modern orientations in contexts of high kinship intensity. Yet historical-critical Islamic scholars argue that traditional gender norms entered the scripture of Islam during the codification of the religious tradition. In combination with the five pillars of Islam, codified scripture constitutes the core of religious belief and practices. Today, religious scriptures which comprise such norms inform sermons in mosques today and many Muslims seem to agree with them (Schröter 2016).

In the following section, we will examine whether clan-based gender roles are still important in many Muslim communities today, based on evidence from Islamic studies and religious sociology. Our study on the influence of Muslim religiousness on adolescents' accordance with violent control of female behavior is based on a comprehensive German database of $N = 32,113$ students. This extensive data set allows us to distinguish between the influences of "culture of honor" and the "clan"-mode of social integration, on the one hand, and the independent effect of Muslim religiousness on the definition of deviance on the other hand. For the subpopulation of adolescents in Germany we find independent effects of being "Muslim and religious" on violence-accepting gender role orientations, particularly regarding the control of females within the family.

Patriarchal orientations, clan societies and Islam

As cultural anthropologists know, it is challenging to analyze global cultures without falling into the trap of ethnocentrism. It is thus important to note that the following descriptions should not be read as a biased valuation of different cultures. For example, while many Westerners, not least academics, appreciate individualism, this is not the case for many non-Westerners. The historical peculiarity of the occidental rationalism of world mastery has been extensively analyzed by M. Weber (1972). Even though Weber was convinced that the Western rationalism " . . . constitutes a historical problem of significance and validity beyond the West" (Schluchter 1985:23), he emphasized the contingency of Western cultural frames (ibd.). In Weber's view, the fact that other cultures should be at least interested in Western rationalism does not necessarily imply any moral superiority of Western culture. Rather, by drawing attention to the danger of the "iron cage" or the "steel-hard casing" (Douglass 2016), Weber contributed to the later critical theory. In a dystopic scenario, modern Westerners do not want to be "persons of vocation," but they simply *must* be. They could lose their personal freedom to the "steel-hard casing" of the modern bureaucracy, which forces people into servitude to an anonymous machinery of power (Weber 1972:835) and addresses individuals *sine ira et studio* (Weber 1972:833). Recent anthropological research describes an additional factor involved in the emergence of Western individualism. In a global comparative perspective, the WEIRD culture (western, educated, industrialized, resourceful, democratic) tends more toward individualism and independence, to impersonal prosociality (e.g. trust to strangers), and less toward obedience and conformity (Henrich, Heine, and Norenzayan 2010:4). According to Schulz et al. (2019), Westerners became WEIRD in the long run, because the Catholic Church imposed restrictive marriage policies. The Church " . . . had become obsessed with incest and began to expand the circle of forbidden relatives, eventually including not only distant cousins but also step-relatives, in-laws, and spiritual kin" (Schulz et al. 2019:2). Cousin-marriages were common in societies all around the world, along

with high kinship intensity and clan-like social organization. The dissolution of clan structures by the marriage and family rules of the Western Church (not the Eastern Orthodox Church) opened the door to the development of a more individualistic and less conformist culture. Thereby, WEIRD individuals became more fair and more trustful of strangers (Henrich 2020; Schulz et al. 2019). Further, they tended more to acknowledge legal states and their monopoly of power (Eisner 2003).

Due to the differentiation of global cultures and increasing levels of global migration, immigrant integration, acculturation and assimilation (Esser 2004) became issues of public as well as scientific interest. In Germany, many immigrants originate from Turkey, the Middle East and Africa, where more traditional, religious and conservative values are prevalent, particularly with respect to gender issues (Inglehart and Norris 2003:67). Kinship and family are usually considered more important in these cultures, also with respect to either instrumental support or positive affect and stimulation (Nauck 2014). Depending on the theoretical and normative perspective, empirical differences in gender roles and family orientations between native adolescents and first and second-generation Muslim immigrants would either indicate incomplete acculturation, or a long-term social change toward multicultural diversity. The concept of *proculturation* (Gamsakhurdia 2022:66) takes a middle ground by highlighting the dynamics of self-development in the course of intercultural mobility on the one hand, and the hybridization of cultural contexts due to "back influence" on the majority, on the other hand (Gamsakhurdia 2022:76).

We regard gender role orientations, family and kinship as crucial for processes of acculturation and proculturation. The concept of a "clan" refers to a form of social integration based on extended kinship. This is not specific to Muslim societies, but also common in pagan and Christian Orthodox societies. In a study on blood revenge in Montenegro (*Upper Morača*) in the 1960s, Boehm (1984) showed how norms of the Orthodox Christian clans regulated individual behavior, particularly by ideas of honor and practices of social ostracism. Patriarchal conceptions of honor and violence outside as well as social control inside the family were dominant in this context (Boehm 1984:66–70). The reputation of the clan was closely linked to the power or vulnerability of the group (Daly and Wilson 1988:224–225), and was crucial for the fate of the individual.

During the pre-Islamic period of "ignorance" (*jahiliyya*) the Arab peninsula was populated with tribal communities, which were integrated by the "rule of the clan" (Weiner 2013). Protection and preservation of honor was essential. Challenging the virtuousness of a clan's women was a serious insult (Fiske and Rai 2015:80). Women's behavior was subject to rigorous control in patrilocal clan-societies since demographic reproduction, marriage opportunities and coalitions with other clans depended on women's reputation (Chagnon 2013:218–220; Daly and Wilson 1988:187–190). Breaches of honor, especially regarding the virtue of women and daughters, could not remain unpunished, because signals of weakness would encourage assaults (Chagnon 2013:86). Only the clan could protect the individual. Loyalty to the clan was a *conditio sine qua non*. Since there was no state and no legitimized and centralized monopoly of violence (Eisner 2003), it was necessary to signal willingness to use violence in order to discourage potential assaults by out-group members (Daly and Wilson 1988:230; Nisbett and Cohen 1996). In addition, internal conformity with norms of honor was enforced by the threat of violence, especially against women (Fiske and Rai 2015:82–83). The clan signals deterrence toward outsiders, but also exerts rigid internal control because individual behavior represented the integrity of the group (Sapolsky 2017:288; Weiner 2013:35–36). Gossip is an important mechanism of social control and of sanctioning potentially deviant behavior, particularly regarding issues of women's chastity (Boehm 1984:83–84; Dunbar 1996:172). Families are eager to avoid a situation wherein "people are already gossiping," since gossip could seriously undermine one's reputation.

The link between Islamic religion and patriarchal orientations is controversial (Baran 2011). Islam evolved in the continuity of the monotheistic, Abrahamitic religions of Judaism and Christianity. A charismatic prophecy of religious renewal (Weber 1972:141) ("it is written, – but I say unto you") had to be acknowledged by the followers and the ruled, so the content of reforms could not be arbitrary. The prophecy should provide a solution to world-immanent problems and conflicts (Weber

1972:140, 656) and should not include too many unusual, revolutionary or novel elements of faith. Rather, it should represent a spiritual advancement of what has already been established (Bangert 2016:30). To proliferate into a mass movement, the charismatic prophecy should be in line with established orders and existing social hierarchies, and further, should in no way weaken the social integration of the group. Social integration is the essential function of religion (Durkheim 2008:chp. 5, IV). In the case of Islam, the combination of elements from Judaism and Christianity (Bangert 2016:652) was crucial for the success and its proliferation into a global mass movement. As with Judaism, the public display of rituals and conformity to religious rules is costly to fake and strengthens ties within the group (Henrich 2009; Sosis 2004; Stark and Finke 2000:148). In addition, Islam is as missionary as Christianity (Jansen 2008:77).

Compared to the pre-Islamic period, women's rights regulated by Shari'a law were definitely a progress. Until the end of the pre-Islamic period, there was no legal security for women at all (Appiah 2011). To thrive as a mass movement, the early Muslim community had to maintain crucial elements of the existing social order. Although Islam was a charismatic prophecy, it did not entirely break with the established order and culture (Bangert 2016:30). Another example of such a path dependency is the biblical "eye for an eye, tooth for a tooth" (Genesis 19:20–21). This is not to be understood as a call for revenge – revenge was the reality of clans anyway (Boehm 1984). Quite the contrary, such rules should *regulate* and *tame* revenge in order to prevent violent excesses between clans (Daly and Wilson 1988:232). In this sense, the Quran declares the practice of honor killings, which were widespread in the pre-Islamic era, as injustice. Extramarital sexuality is referred to as fornication (*zinā*) and is punishable by death (for woman) according to the older Sura 4:15. The newer Sura 24:2, however, invalidates the older one according to the principle of abrogation. Committing *zinā* now entails severe physical punishments for both men and women. Regarding societies like today's Pakistan, Appiah (2011:164) argues: "In the struggle against honor killings, Islam is an ally." Nevertheless, *zinā* is still a ". . . serious offence against the divine order" (Schröter 2019:236).[1] Women shall appear modest in the public, and avoiding *zinā* is usually considered more important for women than for men. Indeed, premarital virginity of daughters is of high importance in many Muslim families still today (Yanik-Şenay 2018:73–74). By the codification of the revealed scriptures, Muslim scholars canonized the hadith (traditional records of the Prophet's words and actions), and the biographical tradition (Bangert 2016:185). Normative elements of Arabic clan structures became codified as part of the religious scripture. From the Islamic point of view, Muhammad was the "Seal of the Prophets," i.e. the revelation of the only God, which began with Abraham and ended with him (Bangert 2016:630).

Today, gender effects on "intergroup dating" exist among Muslim youths, depending on religiousness, sexual conservatism, and parental control. Overall, Muslim girls appear to respond more sensitively to parental control than boys (Carol and Teney 2015). Other studies provide similar evidence of conservative gender role orientations enforced by parental control and socialization in Muslim families (Valk and Liefbroer 2007).

International comparative research shows that patriarchal attitudes are more prevalent among Muslims than among non-Muslims, even when controlling for important confounders (Alexander and Welzel 2011). Inglehart and Norris (2003) even identify differences between Muslims and non-Muslims in gender role orientations and sexuality as the "True Clash of Civilizations."

Among Muslim parents, the rejection of violence declines with increasing religiousness – which is a robust result even when controlling for socio-economic confounders (Wetzels and Brettfeld 2003:141–142). According to a study on Muslims in 21 dominantly Muslim countries, support for honor killings results from religious fundamentalism and Mosque attendance, rather than from the frequency of daily prayers (Beller, Kröger, and Hosser 2019). Hence, social embeddedness in religious communities seems to be more important than beliefs. This is in line with the results of Koopmans (2015) study, which suggest that Muslim fundamentalism has a different effect than strong religiosity: while fundamentalism clearly predicts hostility against out-groups, strong religiosity does not.

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[1]Own translation.

Certainly, the potential threat of daughters' deviant behavior to family honor is an issue also seen in non-Muslim families. Yet, the prohibition of *zinā* has explicitly entered the codified scripture of Islam. It is often regarded as a violation of the assumed divine order, and it is still of normative relevance today. During religious socialization in families and mosques, and also via religious media and the Internet, traditional gender role-orientations are transmitted to Muslim adolescents. Reformist Muslims criticize these norm orientations also from a feminist perspective (Mernissi 1991). Schröter (2019) observes an increasing influence of conservative and fundamentalist interpretations of religious texts in some important Islamic associations in Germany. If these interpretations, including the gender-specific assessment of *zinā*, are transmitted to Muslim adolescents through religious socialization and education, these adolescents may tend more toward agreeing with violent control of daughters.

It is possible that such gender role orientations are stronger when Muslim religious adolescents are exposed to other religious Muslims during daily interaction in the school. The "social proof" mechanism may increase the peer pressure to avoid deviance (Cialdini 2007). In situations of uncertainty, people tend to adjust their definition of the situation to align with other peoples' views (Cialdini 2007:chp. 4). For example, according to Cialdini et al. (1999), collectivistic Polish adolescents react more sensitively to social influence by social proof than the more individualistic US-Americans. Likewise, Turkish immigrants in Belgium form a cohesive group, in which effects of religious transmission are stronger compared with Moroccan immigrants, " . . . due to high degrees of internal cohesion and ethnic retention" (Güngör, Fleischmann, and Phalet 2011:1368). If violence accepting gender role orientations belong at least in part to the religious tradition of many Muslim students, it is possible that they can be sustained more easily if the subgroup is larger and shares one's own viewpoint.

In the following empirical analysis, we test the effect of being a religious Muslim on the agreement with violent control of daughters' behavior. As potential confounders, we control for two sub-dimensions of violence legitimizing norms of masculinity (VLNM). These scales were developed as indicators of "culture of honor" (Enzmann, Brettfeld, and Wetzels 2004). Even when controlling for the culture of honor (see below), however, we expect a positive effect of "Muslim, religious" on violence-accepting gender role orientations. Furthermore, we test whether being a religious Muslim has a net effect on culture of honor, and whether there are effects of "social proof" at the context level of the school class.

Data and methods

Sample

We use data from a countrywide school survey of 9th grade students conducted in 61 administrative districts and cities in Germany in 2007 and 2008 (Baier 2014; Baier et al. 2009). The data collection has been funded and approved by the German Ministry of the Interior. The main topics of the survey were self-reported victimization and delinquency, media use and immigrant integration. We first grouped the 440 urban districts and rural areas into 10 district categories (West Germany: 3 categories of cities according to the number of inhabitants, East Germany: 2 categories of cities, East/West: 2 categories each of rural districts, plus Berlin as a separate sampling point). For each district type, we randomly selected schools, including private schools, as to ensure an accurate sample for Germany. We selected approximately every second or (in cities) every sixth school class from a randomized list. A teacher and a trained interviewer were present in the classrooms during the interviews.

A total of 44,610 adolescents in 2,131 classes and 1,207 schools were interviewed, with a response rate of 62.1%. The average age of the respondents is 15.3 years (see Table A1 in the Appendix). Approximately one in four respondents (27.4%) is of 1st or 2nd immigrant generation. To determine the ethnic origin, we gave priority to information on the mother's country of birth and nationality, because we assume that the relationships of children and adolescents to their mothers are more stable

and intimate, especially in case of divorce or separation. It is important to acknowledge the difficulties in defining immigrant status and highly diverse societies. Giving priority to mothers' origin in ethnically mixed immigrant couples is a pragmatic approach for the second-generation, and also a common practice (Baier et al. 2009; Windzio and Wingens 2014). Obviously, this procedure does not identify third-generation immigrant adolescents, but in most cases the degree of assimilation here is considerably higher. As we will see in the empirical section, the measurement error, which is inherently involved in such a definition and which usually shrinks the estimated effects toward zero (Skrondal and Rabe-Hesketh 2004:76), is far from generating just "noise." Due to the lack of information on religious affiliation, which in some German states resulted from data privacy regulations, we limit our multivariate analysis to 2012 school-classes in 55 regions and $N = 32,113$ students (Baier et al. 2009).

Items and measurements

The category "Muslim, religious" (mr) identifies Muslim adolescents for whom religion is "rather important" or "very important" in everyday life. The same applies to the category "other religion, religious" (or). "Muslim, non-religious" (mn) identifies Muslim adolescents for whom religion is personally "rather unimportant" or "completely unimportant." Other adolescents belong to the category "non-religious, non-Muslims" (nr). According to our definition, of the total $N = 32,113$ respondents included in the analyzes in Table 2, $N_{mr} = 1,839$ (5.73%) are Muslim and religious, $N_{mn} = 160$ (0.50%) are Muslim and non-religious, $N_{or} = 8,452$ (26.3%) are religious in another denomination and $N_{nr} = 21,662$ (67.45%) are non-religious (including no religious affiliation). We analyze three outcome variables, including 1) "honor and external violence," 2) "honor and internal dominance" (Wetzels and Brettfeld 2003), and 3) agreement to "violent control of daughters." Scales indicating violence legitimizing norms of masculinity (VLNM) consist of four-level items (see Table 1) which load on two factors. The two VLNM dimensions differ with regard to the addressees of violent acts or social control, which is why we refer to one dimension as "external violence" and the other as "internal dominance" (see Table 2). The former has a good internal consistency (alpha = 0.73), while the consistency of the second dimension is in our view sufficient for a 3-item scale (alpha = 0.61). The finding of two dimensions of VLNM is in line with Sapolsky's argument, which states that culture of honor defends the family against potential threats from the social environment, but also prevents " ... a woman resisting being the property of her male

Table 1. Dependent variables: violent control of female behavior and VLNM.

Honor and external violence (range 1–4), alpha = 0.73			
VLNM: A man should be prepared to defend his wife and children by force.			
VLNM: A man who is not prepared to defend himself against insults with violence is a weakling.			
VLNM: Men should be allowed to own firearms to protect their family or property.			
VLNM: A real man is prepared to strike when someone speaks ill of his family.			
VLNM: A real man is strong and protects his family.			
Honor and internal dominance (range 1–4), alpha = 0.61			
VLNM: A man as a family man must obey his wife and children.			
VLNM: If a wife cheats on her husband, the husband may beat her.			
VLNM: The man is the head of the family and may, if necessary, use force.			
Accordance with violent control of daughters			
When daughter comes home late at midnight: "I would slap my daughter in the face," $N = 32,113$, N; %; Cum.%			
1. Strongly disagree	N = 27,499;	85.63;	85.63
2. Rather disagree	N = 2,405;	7.49;	93.12
3 Rather disagree	N = 1,361;	4.24;	97.36
4. Strongly agree	N = 848;	2.64;	100

relatives" (Sapolsky 2017:289). We computed the logarithm of "VLNM: honor and internal dominance" as a dependent variable because of its right-skewed distribution, but it remained in its original scaling as an independent variable.

The item "accordance with violent control of daughters" results from a deviant situation as described in the following vignette: against her parents' rule, a 13-year-old daughter returns home late in the evening. Respondents reported whether they would punish their daughter with a slap in the face if they were her parents (see Figure 1 and Table 1).

"Trust in the police" and "(low) self-control" both show good internal consistencies (alpha = 0.84, and 0.73 respectively) (see Appendix). 'Trust in the police' negatively correlates with the ideas of order in clan societies ($r_{VLNM\_ext} = -0.23$, $p < .000$; $r_{VLNM\_int} = -0.13$, $p < .000$) since it indicates acceptance of state institutions. This contrasts with the obligation of men to self-help in clan societies (Daly and Wilson 1988:221). The scale "(low) self-control" is based on four items (see Appendix). "Violent parenting" during the past 12 months and before the age of 12 is measured by two variables each. We asked adolescents to indicate whether their father or mother "smacked" them at least once. Moreover, we measured "violence of father against mother" with the item "I saw my father beat or kicked my mother." Table A3 (Appendix) shows the correlation between the main variables of our models.

Methods

Students (level 1) in our sample are nested in school classes (level 2) in 55 regions (level 3). We predict the dependent variable "accordance with violence-accepting behavioral control of daughters" for the overall sample as well as separately for both genders using multilevel ordinal logistic regressions (Table 2). Selected results were then visualized as average marginal effects (AME). We estimate linear multilevel models (Hox 2010:142) to predict both subdimensions of VLNM. To test the robustness of our findings, we also examine the effects of ethnic-religious categories on the degree of adolescents' religiousness.
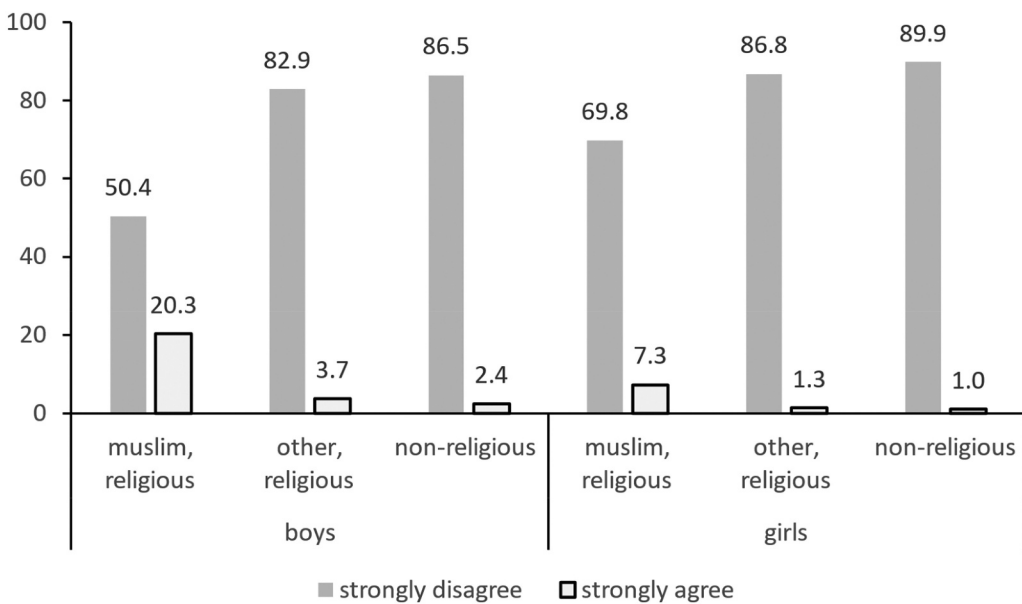

Figure 1. Accordance with violent control of daughters, in percent, *N*= 32113. Item: "Your 13-year-old daughter hasn't returned home at the agreed time at 8:00 p.m., but after midnight. What would you do?" "I would slap her in the face".
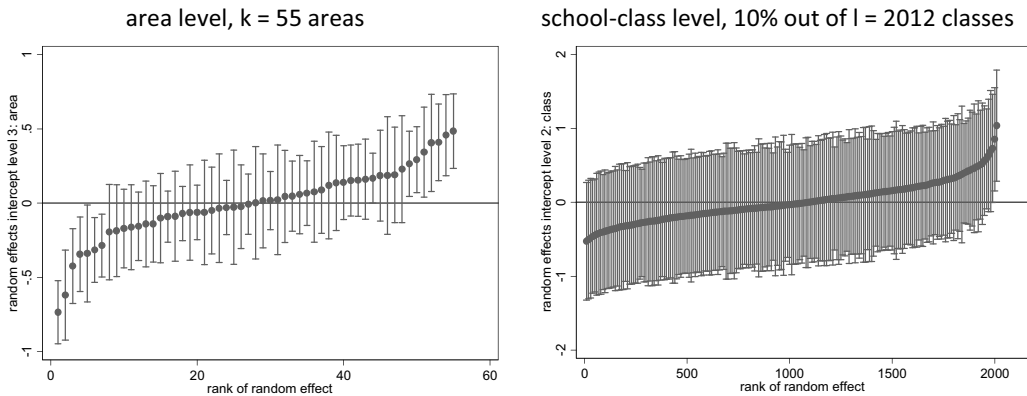
Figure 2. Random intercepts of context levels, empty model Table 2, all.

Results

Respondents can agree or disagree on an ordinal scale to punish the daughter violently for her transgression. Overall, there is a clear tendency to disagree strongly, as seen in in Figure 1. While in the category "not religious" (who are *not* religious Muslims and other non-religious adolescents) the share of strongly disagreeing adolescent boys is 86.5% and of girls 89.9%, it is only 50.4% of boys and 69.8% of girls in the category "Muslim, religious."

Further, the share of boys and girls in the religious Muslim group who "strongly agree" is 20.3% and 7.3%, compared with 2.4% and 1.0% in the group "non-religious." Accordingly, regarding the accordance with violent control of daughters, religious, but non-Muslim adolescents are very similar to non-religious adolescents. Indeed, this result seems to indicate cultural frames of deviance "at work." However, the bivariate analysis suffers from not accounting for confounding factors, such as ethnic or social origin.

Figure 2 shows the random effects of the intercept at level 3 (area) and level 2 (school-class) from a multilevel ordered logistic model without covariates ("empty model"). The right graph represents a 10% sample out of 2012 classes. These differences between random effects indicate potential context effects on the outcome.

In Table 2 we present six multilevel ordered logistic regressions of accordance with violent control of daughters (see Figure 1). The first two columns show coefficients for the overall sample, whereas Models (3) and (4) are limited to a subsample of boys and Models (5) and (6) to a subsample of girls. For each subsample, the second model enhances the first with a cross-level interaction effect.

In Model (2) in Table 2 (overall sample) we find a positive and highly significant effect of "Muslim, religious" on accordance with violent control of daughters as compared to non-religious adolescents (reference group), even considering a huge set of potential confounders. The log odds of a higher vs. a lower category of accordance with violent control of daughters increase by 0.493 ($p \leq .000$), whereas the effect of non-religious Muslims is insignificant.

We find a significantly positive, but considerably smaller effect of "other religion, religious." While *zinā* is the Quranic version of the norm of female chastity, similar norms seem to be important in other religions as well, although to a much lesser degree.

If we restrict our sample to boys in Model (4), results become more pronounced than in the overall sample. Religious Muslim girls do not agree more with violent control of daughters than non-religious girls (Model 6). The fact that Muslim boys do agree more with violent control of daughters may indicate that they apply a different cognitive frame to this situation and have a greater tendency to associate the vignette-situation with the risk of *zinā* than girls do.

Overall, covariate patterns are similar between boys and girls, with some interesting exceptions. If boys went to a childcare institution in Germany, they show a lower accordance with violent control of

Table 2. Three-level ordered logistic regression of "accordance with violent control of daughters".

Ref.: other, not relig. & no relig.	Violent contr. daughter: all		Violent contr. daughter: boys		Violent contr. daughter: girls	
	(1)	(2)	(3)	(4)	(5)	(6)
	ref.	ref.	ref.	ref.	ref.	ref.
Muslim, religious	0.477***	0.493***	0.699***	0.703***	0.210	0.231
Muslim, not religious	0.184	0.182	0.163	0.163	0.209	0.207
Other religion, religious	0.189***	0.189***	0.145*	0.145*	0.251***	0.251***
cognitive skills						
Was in German child care	−0.148*	−0.149*	−0.234*	−0.234*	−0.027	−0.028
Age	0.008	0.008	−0.004	−0.004	0.046	0.045
High school level	−0.184***	−0.183***	−0.117⁺	−0.117⁺	−0.265**	−0.265**
Mean school level	0.024	0.024	−0.015	−0.015	0.080	0.080
Integrated school level	−0.054	−0.054	−0.012	−0.012	−0.119	−0.119
Grade German	0.013	0.013	0.049	0.050	−0.034	−0.034
Grade Maths	−0.011	−0.011	−0.003	−0.003	−0.020	−0.020
personality & attitudes						
(low) self control	0.006	0.006	−0.013	−0.013	0.034	0.034
VLNM: Honor & external viol.	0.308***	0.308***	0.251***	0.251***	0.416***	0.415***
VLNM: Honor & internal domin.	0.492***	0.492***	0.497***	0.497***	0.500***	0.500***
Trust in the police	−0.076***	−0.076***	−0.036	−0.036	−0.140***	−0.140***
living conditions						
Violence father against mother	0.235**	0.234**	0.396**	0.396**	0.094	0.094
Violence parents, childhood	0.866***	0.866***	0.824***	0.824***	0.948***	0.948***
Violence parents, last 12 months	0.393***	0.393***	0.396***	0.396***	0.370***	0.370***
Mother: high school degree	0.015	0.015	−0.005	−0.005	0.050	0.050
Own room at home	−0.020	−0.020	−0.004	−0.004	−0.069	−0.069
Unemployment/social assistance	0.116⁺	0.116⁺	0.183*	0.183*	0.042	0.042
Visited a museum last 12 month	0.074⁺	0.074⁺	0.091⁺	0.091⁺	0.046	0.047
No. of books at home/10	−0.000	−0.000	−0.002	−0.002	0.002	0.002
immigrant origin (ref.: native)						
Turkish	0.405***	0.404***	0.363*	0.363*	0.415**	0.414**
former Soviet Union	0.244***	0.243***	0.100	0.099	0.350***	0.350***
former Yugoslavia	0.469***	0.467***	0.318⁺	0.318⁺	0.601***	0.599***
Polish	0.034	0.033	−0.083	−0.083	0.139	0.138
other	0.275***	0.274***	0.256**	0.256**	0.280**	0.279**
context effects						
East Germany	0.399***	0.401***	0.218⁺	0.218⁺	0.632***	0.634***
% religious Muslims	0.011***	0.011***	0.008**	0.009**	0.014***	0.014***
% non-religious Muslims	0.011	0.011	−0.004	−0.004	0.038*	0.038*
% religious other	0.003*	0.003*	0.003	0.003	0.004⁺	0.004⁺
Muslims, rel.X%rel. Musl.	–	−0.001	–	−0.000	–	−0.001
cut1	3.659***	3.655***	3.526***	3.525***	4.191***	4.184***
cut2	4.614***	4.610***	4.424***	4.423***	5.248***	5.241***
cut3	5.759***	5.755***	5.446***	5.445***	6.668***	6.661***
L. 3: var(Cons.), 55 areas	0.020*	0.020*	0.019*	0.019*	0.021	0.021
L. 2: var(Musl., rel.)	0.169	0.164	0.457⁺	0.455	0.249	0.236
L. 2: var(Cons.), 2012 classes	0.068**	0.068**	0.042	0.042	0.167***	0.167***
L. 2: cov(Cons, Musl., rel.)	0.022	0.021	0.011	0.011	0.000	0.001
Observations	32113	32113	16017	16017	16096	16096

⁺$p < .1$, *$p < .05$, **$p < .01$, ***$p < .001$.

daughters (−0.234, $p < .05$). Exposure to an assimilative environment in early childhood thus has a preventive effect for boys, but not for girls. Moreover, the effect of "honor and internal dominance" is stronger than of "honor and external violence". This difference is more pronounced for boys than for girls (0.251, $p < .000$ vs. 0.497, $p < .000$ for boys in Model (4) compared with 0.451, $p < .000$ vs. 0.500, $p < .000$ for girls). Girls and boys also differ in the effect of "trust in the police," which significantly decreases the accordance with violent control for girls, but not for boys. Furthermore, parental violence during early childhood and during adolescence increases the accordance with violent control of daughters, whereas observed victimization of their mothers by their fathers has
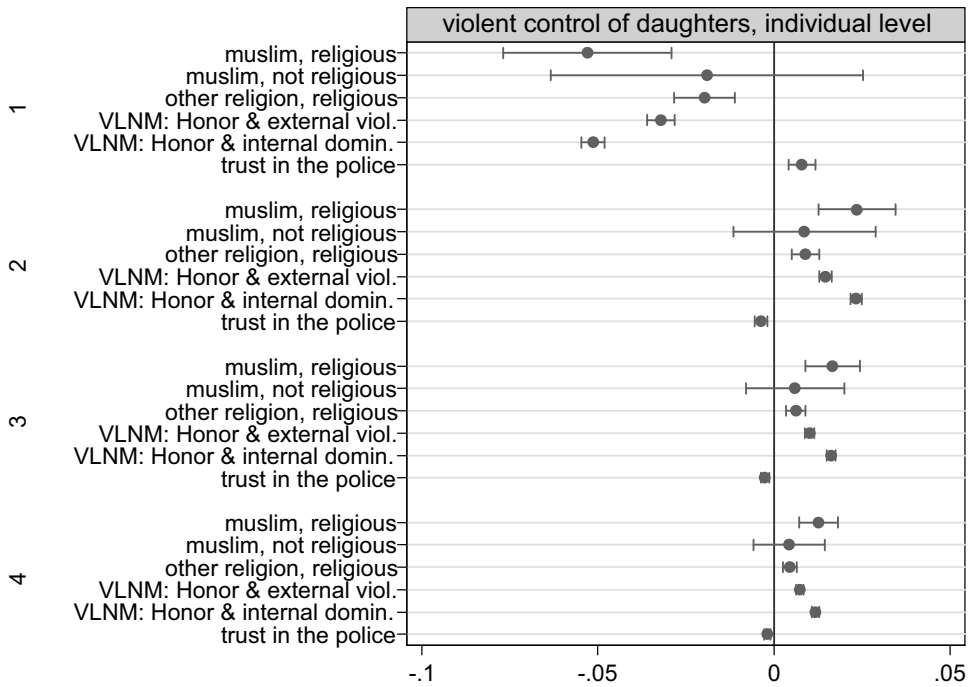
Figure 3. Average marginal effects (95% confidence interval), selected *individual* level factors, model 2 in Table 2.

a significantly positive effect for boys only. Perhaps, girls identify more with their mothers, whereas boys might adopt their fathers' point of view through social learning (Bandura and Walters 1963). In addition, there is a significantly positive effect of unemployment or social assistance for boys, but not for girls. In line with existing studies (Enzmann, Brettfeld, and Wetzels 2004) there are also significant differences between categories of ethnic origin. Boys of Turkish origin show the highest agreement with violent behavior control of daughters, whereas girls from former Yugoslavia most strongly agree. Except for students of Polish origin, students of immigrant origin generally have a higher tendency to agree with violent control of daughters.

We also find context-effects of the religious composition of classrooms: the higher the share of religious Muslims in a classroom, the higher is the individual's accordance with violent control of daughters, regardless of whether the respondent is a religious Muslim or not (Model (2)). According to our group-specific *social proof* argument, we expected a cross-level interaction effect: in contexts with high percentages of religious Muslims, the accordance of religious Muslims might be higher. Empirically, however, this is not the case. The interaction term "Muslim, religiousX% religious Muslims" is insignificant and close to 0. Therefore, the share of religious Muslims increases the accordance with violent control of daughters for the *whole* sample. We also find insignificant cross-level interaction effects in separate models for boys and girls. Strikingly, in the female sample also the effect of "share non-religious Muslims" is significantly positive: girls in classes with a high share of non-religious Muslims tend more to agree with violent control of daughters. Again, these context-effects are in line with a general mechanism of social proof: they have an influence on the entire school class, but they are not particularly strong for Muslim students, neither for Muslim boys nor for Muslim girls. Here we may see an example of "back influence" and hybridization of the host country's culture in a situation where the share of the religious-cultural minorities increases or even becomes the majority in the respective social context (Gamsakhurdia 2022:76).
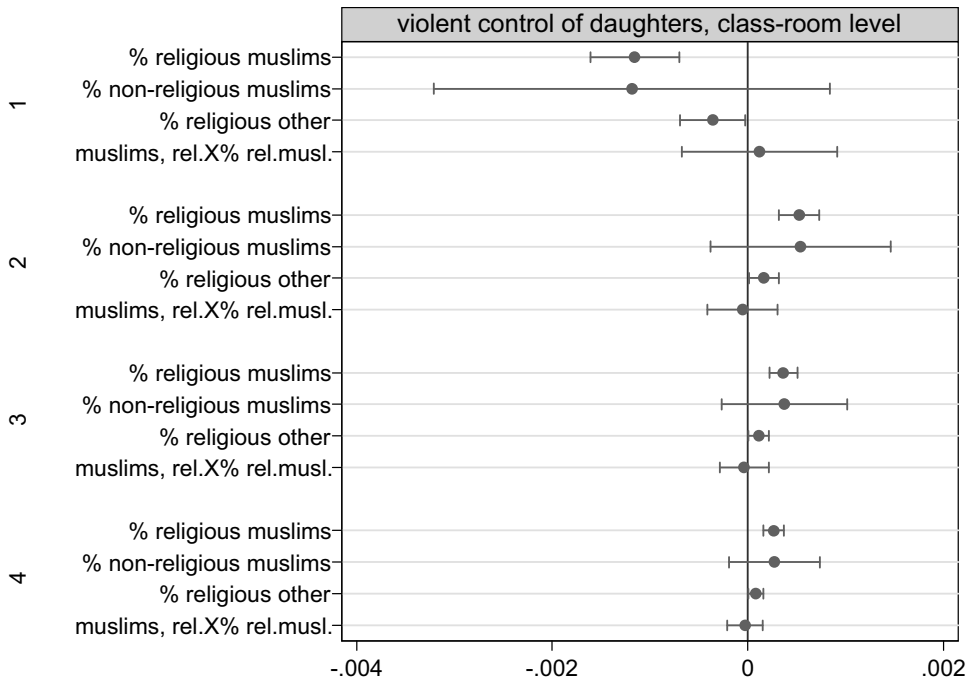
Figure 4. Average marginal effects (95% confidence interval), selected *class-room* level factors, model 2 in Table 2.

We predicted individual and school class-level average marginal effects (AME) from Model 2 in Table 2 (see Figures 3 and 4). The numbers on the left side represent the categories of the ordinal dependent variable (see Table 1). Each error bar shows the effect and its confidence interval. There is no significant AME if the confidence interval includes the vertical zero-line.

In Figure 3 the AMEs of "Muslim, religious" for the four categories of the dependent variable are −0.052 ($p < 0.000$) (1. strongly disagree), 0.023 ($p < 0.000$) (2. rather disagree), 0.016 ($p < 0.000$) (3. rather agree) and 0.012 ($p < 0.000$) (4. strongly agree). Accordingly, religious Muslims have a 5.2% points lower probability of strongly disagreeing, whereas the probabilities of the remaining three categories are significantly increased. Since the cross-level interaction term in Model 2 in Table 3 is insignificant and close to zero, we can conclude a similar pattern for the main effect of "% religious Muslims" in Figure 4: −0.0011 ($p < 0.000$) (1. strongly disagree), 0.0005 ($p < 0.000$) (2. rather disagree), 0.0003 ($p < 0.000$) (3. rather agree) and 0.0002 ($p < 0.000$) (4. strongly agree). In other words, one percentage point increase in "% religious Muslims" decreases the probability of strongly disagreeing by 0.11% points, whereas the probabilities of the remaining three categories are significantly increased. The effect of "Muslim, religious" is thus significantly positive in the overall sample, even if we control for large set of potential confounders. Furthermore, the two subdimensions of VLNM as indicators of "culture of honor" strongly increase the accordance with violent control of daughters. The t-statistics in Model (2), Table 2, are 16.50 (VLNM: Honor and external violence) and 31.74 (VLNM: Honor and internal dominance), the corresponding average marginal effects on the probability of category 1 ("strongly disagree") are −0.032 ($p < 0.000$) and −0.052 ($p < 0.000$) (Figure 3). The individual level effect of being a religious Muslim remains strong and significant in Table 2, but this holds true for boys only, not for girls. Surely, Muslim religiousness does not explain the overall variance of the dependent variable as there are many other significant explanatory factors, but Muslim religiousness does have an independent effect for boys even if we control for VLNM.

Table 3 shows the effects of Muslim religiousness and potential confounders on "honor and external violence," and Table 4 shows these effects on "honor and internal dominance." Overall, "honor and

Table 3. Three-level linear regressions of adolescents' accordance with "VLNM: honor and external violence".

	Honor and external violence: all		Honor and external violence: boys		Honor and external violence: girls	
	(1)	(2)	(3)	(4)	(5)	(6)
ref.: other, not relig. & no relig.	ref.	ref.	ref.	ref.	ref.	ref.
Muslim, religious	0.039	0.095*	0.042	0.126*	0.051	0.088
Muslim, not religious	0.119	0.115	0.086	0.081	0.157	0.154
other religion, religious	0.011	0.010	−0.004	−0.005	0.016	0.015
cognitive skills						
was in German child care	−0.013	−0.014	0.010	0.006	−0.033	−0.033
age	0.048***	0.047***	0.030*	0.029*	0.027*	0.027*
high school level	−0.216***	−0.215***	−0.203***	−0.200***	−0.182***	−0.182***
mean school level	−0.144***	−0.144***	−0.084***	−0.084***	−0.169***	−0.169***
integrated school level	−0.127***	−0.127***	−0.104***	−0.106***	−0.096***	−0.097***
grade German	−0.085***	−0.085***	−0.025*	−0.025*	−0.038***	−0.038***
grade Maths	−0.018***	−0.018***	−0.057***	−0.057***	−0.033***	−0.033***
personality & attitudes						
(low) self control	0.274***	0.274***	0.265***	0.265***	0.209***	0.209***
trust in the police	−0.101***	−0.101***	−0.114***	−0.114***	−0.069***	−0.069***
living conditions						
violence father against mother	0.071*	0.072*	0.124*	0.124*	0.087*	0.087*
violence parents, childhood	0.018	0.018	0.033*	0.033*	0.003	0.003
violence parents, last 12 month	0.007	0.007	0.015	0.015	0.062**	0.062**
mother: high school degree	0.015	0.015	−0.008	−0.008	0.001	0.001
own room at home	0.031	0.030	0.023	0.021	0.019	0.018
unemployment or social assistance	−0.040*	−0.040[+]	−0.009	−0.006	−0.009	−0.009
visited a museum last 12 month	−0.072***	−0.072***	−0.115***	−0.114***	−0.056***	−0.056***
no. of books at home/10	−0.003***	−0.003***	−0.002***	−0.002***	−0.003***	−0.003***
immigrant origin (ref.: native)						
Turkish	0.077*	0.076*	0.064	0.060	0.102*	0.101*
former Soviet Union	0.263***	0.261***	0.276***	0.272***	0.319***	0.318***
former Yugoslavia	0.151***	0.148***	0.163*	0.160*	0.182**	0.180**
Polish	0.095**	0.093**	0.154***	0.150***	0.087*	0.086*
other	0.112***	0.110***	0.126***	0.123***	0.127***	0.126***
context effects						
East Germany	0.091**	0.093**	0.134***	0.138***	0.044	0.046
% religious Muslims	0.001*	0.002**	0.002*	0.003**	0.001	0.002[+]
% non-religious Muslims	0.005	0.005	0.007	0.007	0.002	0.003
% religious other	−0.001*	−0.001*	−0.000	−0.000	−0.001[+]	−0.001[+]
Muslims, rel.X%rel. Musl.	–	−0.004**	–	−0.006**	–	−0.003
Constant	−0.203	−0.196	0.105	0.117	−0.180	−0.175
L. 3: Var(Cons.), 55 areas	.0024***	.0024**	.0012	.0012	.0040**	.0039**
L. 2: Var(Cons.), 2012 clas.	.0240***	.0239***	.0305***	.0304***	.0260***	.0259***
L. 2: Var(Musl., rel.	.0548*	.0499*	.0549	0474	.1558**	.1526**
L. 2: Cov(Const, Musl., rel.)	−.003	−.0032	−.0281[+]	−.0283*	−.0128	−.0124
Var(e)	.7736***	.7737***	.8416***	.8417***	.6434***	.6435***
Observations	32113	32113	16017	16017	16096	16096

$+ p < .1$, $*p < .05$, $** p < .01$, $***p < .001$.

external violence" in Table 3 depends on indicators of cognitive capability and cultural capital, but not systematically on religious background. The higher the school level in the stratified German system, the lower is the accordance with "honor and external violence." Moreover, the outcome decreases (Model 2, Table 3) with better grades in German (−0.085, $p < 0.000$) and Mathematics (−0.018, $p < 0.000$), higher numbers of books at home (−0.003, $p < 0.000$) and cultural practices such as visiting a museum (−0.072, $p < 0.000$), whereas it increases with higher levels of low self-control (risk seeking subscale, see Appendix) (0.274, $p < 0.000$). The outcome is increased in East Germany, but only in the complete sample (0.093, $p < 0.000$ in Model (2)) and in the subsample of boys. It significantly increases when adolescents observe violence by their father against their mother and if they were themselves violently victimized by their parents, although the latter effect is only significant for girls (0.062, $p < 0.000$ in Model (6)).

Table 4. Three-level linear regressions of adolescents' accordance with "VLNM: honor and internal dominance".

	Honor and internal dominance: all		Honor and internal dominance: boys		Honor and internal dominance: girls	
	(1)	(2)	(3)	(4)	(5)	(6)
ref.: other, not relig. & no relig.	*ref.*	*ref.*	*ref.*	*ref.*	*ref.*	*ref.*
Muslim, religious (ref.: other religion, not religious/ no religion)	0.237***	0.203***	0.281***	0.241***	0.216***	0.185***
Muslim, not religious	0.010	0.011	0.082[+]	0.084[+]	−0.040	−0.039
other religion, religious	0.056***	0.056***	0.065***	0.065***	0.042***	0.042***
cognitive skills						
was in German child care	−0.058***	−0.058***	−0.077***	−0.076***	−0.033**	−0.033**
age	0.006[+]	0.006[+]	−0.004	−0.003	−0.003	−0.003
high school level	−0.040***	−0.040***	−0.031***	−0.032***	−0.034***	−0.034***
mean school level	−0.023***	−0.023***	−0.015[+]	−0.015[+]	−0.018**	−0.018**
integrated school level	−0.014[+]	−0.013[+]	−0.002	−0.001	−0.007	−0.007
grade German	−0.035***	−0.035***	−0.011**	−0.011**	−0.019***	−0.019***
grade Maths	0.014***	0.014***	0.002	0.002	0.005*	0.005*
personality & attitudes						
(low) self control	0.038***	0.038***	0.047***	0.047***	−0.003	−0.003
trust in the police	−0.018***	−0.018***	−0.029***	−0.029***	0.005[+]	0.005[+]
living conditions						
violence father against mother	0.017	0.017	0.074***	0.073***	0.003	0.003
violence parents, childhood	0.029***	0.029***	0.047***	0.047***	0.011*	0.011*
violence parents, last 12 month	0.023***	0.023***	0.045***	0.045***	0.028***	0.028***
mother: high school degree	0.013**	0.013**	0.007	0.007	0.004	0.004
own room at home	−0.028***	−0.028***	−0.034**	−0.034**	−0.029***	−0.029***
unemployment or social assistance	−0.014[+]	−0.015[+]	−0.002	−0.003	0.003	0.003
visited a museum last 12 month	0.001	0.001	−0.005	−0.005	−0.003	−0.003
no. of books at home/10	−0.001***	−0.001***	−0.001***	−0.001***	−0.000**	−0.000**
immigrant origin (ref.: native)						
Turkish	0.124***	0.125***	0.141***	0.142***	0.090***	0.090***
former Soviet Union	0.022*	0.023*	0.058***	0.059***	0.018[+]	0.019[+]
former Yugoslavia	0.061***	0.062***	0.087***	0.088***	0.053**	0.053**
Polish	0.006	0.006	0.033[+]	0.034*	−0.002	−0.001
other	0.004	0.005	0.020[+]	0.021*	0.003	0.003
context effects						
East Germany	−0.004	−0.005	−0.019	−0.020	0.012	0.012
% religious Muslims	0.001*	0.000	0.001	0.000	0.001[+]	0.000
% non-religious Muslims	−0.001	−0.001	−0.003	−0.003	−0.000	−0.000
% religious other	0.000	0.000	0.000	0.000	0.000	0.000
Muslims, rel.X%rel. Musl.	–	0.003***	–	0.003**	–	0.002*
Constant	0.758***	0.755***	0.907***	0.903***	0.773***	0.771***
L. 3: Var(Cons), 55 areas	.0002**	.0002**	.0004**	.0004*	.0002*	.0002*
L. 2: Var(Cons), 2012 clas.	.0015***	.0015***	.0030***	.0029***	.0008**	.0008**
L. 2: Var(Musl., rel.)	.0499**	.0486**	.0525**	.0514**	.0721***	.0711**
L. 2: Cov(Co., Musl.,rel.)	−.0011	−.0012	−.0046*	−.0048*	.0011	.0011
Var(e)	.1092***	.1092***	.1327***	.1327***	.0731***	.0731***
Observations	32113	32113	16017	16017	16096	16096

[+]$p < .1$, *$p < .05$, **$p < .01$, ***$p < .001$.

Again, we find significant differences between ethnic groups in Table 3. Compared to the reference group of adolescents without migration heritage, there is a comparatively small, but significantly positive effect for the category "Turkish" in the overall sample and in the subsample of girls. In the female subsample, we find the strongest effects in the category "former Soviet Union." Moreover, the share of religious Muslims in the classroom significantly increases the accordance with "honor and external violence" in the full sample and in the subsample of boys, but it is only marginally significant for girls in Model (6). In addition, the interaction effect "Muslim, rel.X%rel.Musl." is negative in Models (2) and (4), which means that it reduces the positive main effects. Similarly to the outcome variable in Table 2 ("accordance with violent control of daughters"), there is some evidence of a *social*

proof effect, but a high share of religious Muslims tends to affect religious Muslims to a *lesser* degree than other adolescents. Interestingly, the individual level effect of "Muslim, religious" becomes significantly positive in both the overall sample and for boys, after controlling for the cross-level interaction effect. Unlike the outcome in the Table 2, we should not conclude from Table 3 that there is an independent effect of Muslim religiousness on accordance with "honor and external violence." In other words, Muslim religiousness does not *generally* correspond with norms of honor, since such norms consist of several sub-dimensions.

Regarding the second sub-dimensions of VLNM, namely "honor and internal dominance" in Table 4, there are again strong, significant and consistently positive net effects of "Muslim, religious," after controlling for various potential confounders. We also find significantly positive effects of "other religion, religious," but these are much weaker than the effects of "Muslim, religious." We thus conclude that Muslim religiousness increases the accordance with violent norms directed toward the regulation of social relationships and hierarchies *within* families, " . . . when honor is threatened from within" (Sapolsky 2017:288). Norms of male violent behavior are not independent of Muslim religiousness. In other words, religion seems to matter. Interestingly, there is no evidence in Table 4 that high cognitive capabilities and cultural capital consistently reduce accordance with these norms. While good grades in the subject "German" and higher numbers of books at home have negative effects, good grades in Mathematics seem to increase the accordance with these norms in the complete sample in Models (2) (0.014, $p \leq 0.000$) and (6) for girls (0.005, $p \leq 0.000$) in Table 4. Violent victimization by parents during childhood and adolescence consistently increases the accordance across all models, whereas adolescents who have their own room at home show lower accordance than the reference group. Regarding ethnic origin, we find the strongest positive effects in the categories "Turkish," "former Soviet Union" and "former Yugoslavia." At the context level of the school class there is no significant main effect of "% religious Muslims" after controlling for the cross-level interaction effect "Muslim, rel.X%rel.Musl.." This cross-level interaction, in turn, is significantly positive in Models (2), (4) and (6) in Table 4. Following from this, the share of religious Muslims in the classroom significantly increases the accordance with norms of "honor and internal domination" only for religious Muslim students. In this instance, the *social proof* mechanism applies only for religious Muslims. In contrast, the social proof effect did not differ regarding the accordance with violent control of daughters (Table 2) and was even weaker for religious Muslim boys for "honor and external violence" (Table 3). This is an important finding, which underscores the multi-dimensionality of attitudes toward gender-related violence.

Finally, Table A2 (Appendix) presents the net effect of being Muslim on religiousness (for the measurement, see Appendix). Here, we again find a social proof effect: net of their individual characteristics, adolescents tend to be more religious as the share of Muslims in their class increases. This effect is more pronounced for girls. For boys, the main effect becomes even insignificant after controlling for the cross-level interaction "% Muslims X Muslim." Thus, the social proof mechanism in the subsample of boys (%Muslims in a class) affects only Muslims, but not boys of other religious denominations. Increasing Muslims' religiousness with increasing share of Muslims in the class – net of individual level characteristics – might point to the risk of being identified as an apostate (Surah 16: 106) by a non-ignorable group of classmates. Apostasy, 'ridda' in Arabic, is a serious transgression in Islam. Conservative Muslim communities do not only socially sanction *ridda*, it is also a criminal offense in some dominantly Islamic countries (Tibi 2012: 166).

Results of our multilevel models can be summarized as follows: there is a positive and robust effect of "Muslim, religious" on accordance with violent control of daughters even if we control for a large set of potential confounders. However, this effect only exists in the subsample of male adolescents, but not for females. Since this effect robustly persists for boys after controlling for indicators of "culture of honor," we suggest that this effect can be explained with religious ideas and religious norms codified in religious scriptures. These texts address men and women differently. Our results indicate that a part of the cultural frames of deviance that legitimize violence within the family, and thereby (re-)establish hierarchies between men and women (Fiske and Rai 2015), can be explained by religiousness. While

this holds only for boys with respect to accordance with violent control of daughters, it applies to the whole sample – girls and boys – with respect to "VLNM: honor and internal dominance." As we have argued, the Quranic concept of *zinā* might still be of relevance if regarded as the word of God. Further, it has an influence on whether we define behavior as deviant or not. In the end, there may be as many interpretations of Quranic verses as there are Muslims. To be identifiable as a coherent worldview, however, a religion needs a minimum of consensus and coherence, regardless of the variety of religious practices and individual interpretations of the religious scriptures. If these interpretations were completely arbitrary and individualistic, a religion would not offer any opportunity for collective identification and would not be able to proliferate in the long run. The fact that we speak of "Christianity" or of 'Islam' today implies that there is at least a semantic core of religious content.

Regarding the context-effects, the share of religious Muslims in a class has positive effects on accordance with violent control of daughters for all students, but these effects are not stronger in the Muslim subgroup. In contrast, the effects of social proof for the outcomes "VLNM: honor and internal dominance" and religiousness are in line with our expectation, given that they are positive for (religious) Muslims.

Conclusion

We examined the influence of Muslim religiousness on violence-accepting gender role orientations. We argued that deviance and sanctions also depend on cultural and religious frames. Our theoretical arguments highlight why Muslim religiosity, in addition to the indicators of "culture of honor," could have an independent effect on the "accordance with violent control of daughters." Islamic Studies emphasize that there is not "one" Islam, but a variety of frames, beliefs and practices. Even within the category "Muslim, religious" there are considerable differences in value orientations. Our multivariate analyzes showed that even after controlling for the VLNM, there are significant effects of "Muslim, religious" on accordance with violent control of daughters. There are robust effects of "Muslim, religious" for boys and the overall sample. In addition, "Muslim, religious" has a significant effect on "VLNM: honor and internal dominance" for boys and girls. This finding is in line with our expectation, resulting from the assumed effectiveness of how codified and written content of Muslim religiousness influence social relationships within the family. This is a plausible reason why Muslim religious adolescents are *ceteris paribus* and *on average* more likely to agree to violent control of daughters. However, despite our comprehensive database, it was not possible to conduct a robust multivariate test that compares religious and non-religious Muslims; this is because the confidence interval is comparatively large due to the small number of cases in the latter group ($N_{mn} = 160$) (Figure 2). Over 90% of Muslim adolescents report that they are religious.

The concept of *zinā* is part of the normative universe established by divine revelation. Adolescent daughters who evade parental control in the scenario outlined in the vignette can be exposed to deviant situations suspected of *zinā* from the perspective of religious communities. They can violate the "divine order," but also the reputation of the family if "people already start gossiping." Given that our study is based on standardized indicators and methods, it is inappropriate to reconstruct the subjective reasons of why young people tend to agree with the item. Not all adolescents would refer to the theological concept of *zinā* as a reason for their agreement, even if these normative conceptions entered the stock of taken-for-granted knowledge in many Muslim communities. On the other hand, we should not assume that religious teachings in families and mosques are irrelevant for adolescents. One reason for the recent increase in conservative to fundamentalist attitudes among Muslims in Germany and Europe (Baran 2011; Heitmeyer, Schröder, and Müller 1997) could be the increased influence of conservative religious organizations (Schröter 2016, 2019). Another reason may be the increased proportion and local clustering of religious Muslims in particular areas.

The social affirmation of conservative religious attitudes, in the sense of social proof, could lead to the social discrediting of those who deviate from the collectively shared viewpoint in contexts with high proportions of religious Muslims. According to our results, however, the evidence of the social

proof effect is mixed. High shares of religious Muslims in the class-room increase the accordance with violent control of daughters for *all* students, not just for religious Muslims. We find the expected *social proof* effect only for the sub-dimension "honor and internal domination:" increasing shares of religious Muslims increase the accordance only for religious Muslims.

It is important to note that part of our research design is based on measurements wherein adolescents take the role of parents or adults. Hence, we do not get direct information from the parents themselves. While this could be considered a limitation of our study, it is arguable that the measurement provides information on the *wider* validity and legitimacy of cultural and religious norms. The fact that these norms seem to be still relevant in the adolescent generation is an important finding in our view.

Our findings are relevant to debates on immigrant integration. As argued in proculturation theory (Gamsakhurdia 2022), context-factors such as the share of religious Muslims seem to not only influence the self-development of young religious Muslims, but also of their non-Muslim counterparts. Gender role orientations relate to how parents intervene as third parties in the integration of children and adolescents into peer networks. Further theoretical considerations are necessary to clarify which level of social embedding into contexts – region, school, class or even the clique – affects violence accepting gender role orientations. Future research should focus more on the actual content of Muslim religiousness. Non-standardized data should be used as well to investigate how these orientations become stabilized by communication within religious communities (Schröter 2016) and to what extent they are relevant to behavior.

Disclosure statement

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Appendix

(Low) self-control (range 1-4), alpha = 0.84
Self-control Risk Seeking:I like to test my limits by doing something dangerous.
Self-control Risk Seeking:Sometimes I find it exciting to do things that put me in danger.
Self-control Risk Seeking:Excitement and adventure are more important to me than safety.
Self-Control Risk Seeking: I like to take risks just because it's fun.
Trust in the police, range (1-4), alpha = 0.73
The police provide us with security.
The police treat you unfairly.
I have great faith in the police.
The police also try to help victims of crime.
Religiousness, alpha = 0.82
How important is religion in your education at home?
How important is religion for you personally in your everyday life? (1. Compl. Unimportant; 4. very important)
How often have you visited place of worship (church, mosque, synagogue) the last 12 months?
How often have you prayed in the last 12 months? (1. never; 7. daily)

Table A1. Descriptive statistics after model 1, Table 2.

N=31113	mean	sd	min	max
slap daughter in face	1.24	0.65	1	4
Muslim, religious	0.06	0.23	0	1
Muslim, not religious	0	0.07	0	1
other religion, religious	0.26	0.44	0	1
was in German child care	0.94	0.23	0	1
age	15.23	0.67	13	20
high school level	0.34	0.47	0	1
mean school level	0.25	0.43	0	1
integrated school level	0.13	0.34	0	1
grade German	4.01	0.84	1	6
grade Maths	3.89	1.05	1	6
(low) self-control*	−0.01	0.99	−1.39	2.38
VLNM: Honor & external viol.	−0.04	0.99	−2.99	2.94
VLNM: Honor & internal domin. +	2.16	0.95	1	7.88
trust in the police*	0.03	0.98	−2.49	1.78
violence father against mother	0.03	0.17	0	1
violence parents, childhood	0.4	0.49	0	1
violence parents, last 12 month	0.15	0.36	0	1
mother: high school degree	0.28	0.45	0	1
own room at home	0.91	0.28	0	1
unemployment or social assistance	0.07	0.25	0	1
visited a museum last 12 month	0.41	0.49	0	1
no. of books at home/10	20.01	19.56	0	60
turkish	0.05	0.21	0	1
former Soviet Union	0.06	0.23	0	1
former Yugoslavia	0.01	0.12	0	1
polish	0.03	0.17	0	1
other	0.1	0.3	0	1
East Germany	0.06	0.24	0	1
% religious Muslims *	0	10.14	−5.9	79.82
% non-religious Muslims *	0	1.7	−0.49	32.84
% religious other *	0	13.21	−25.53	60.19

*mean centered, + re-scaled to positive range for allowing logarithm.

Table A2. Three-level linear regressions of adolescents' religiousness.

	all		boys		girls	
	(1) Religiousn.	(2) Religiousn.	(3) Religiousn.	(4) Religiousn.	(5) Religiousn.	(6) Religiousn.
Muslim	0.346***	0.292***	0.413***	0.341***	0.266***	0.226***
cognitive skills						
was in German child care	−0.029**	−0.028**	−0.004	−0.000	−0.052***	−0.052***
age	−0.035***	−0.035***	−0.036***	−0.035***	−0.030***	−0.030***
high school level	0.086***	0.084***	0.067***	0.063***	0.094***	0.093***
mean school level	0.059***	0.059***	0.048***	0.047***	0.063***	0.063***
integrated school level	0.011	0.011	−0.005	−0.004	0.014	0.015
grade German	0.035***	0.035***	0.032***	0.032***	0.023***	0.022***
grade Maths	0.016***	0.015***	0.016***	0.016***	0.022***	0.022***
personality & attitudes						
(low) self-control	−0.035***	−0.035***	−0.028***	−0.028***	−0.034***	−0.034***
VLNM: Honor & external viol.	−0.007**	−0.007**	−0.009*	−0.009*	0.010**	0.010**
VLNM: Honor & internal domin.	0.037***	0.036***	0.033***	0.032***	0.065***	0.064***
trust in the police	0.063***	0.063***	0.058***	0.057***	0.070***	0.070***
living conditions						
violence father against mother	0.002	0.001	−0.014	−0.014	0.005	0.005
violence parents, childhood	0.004	0.004	0.011	0.011	−0.001	−0.001
violence parents, last 12 month	0.027***	0.027***	0.039***	0.039***	0.010	0.010
mother: high school degree	−0.010[+]	−0.010[+]	−0.014[+]	−0.014[+]	0.002	0.002
own room at home	−0.080***	−0.078***	−0.073***	−0.070***	−0.082***	−0.081***
unemployment/social assist.	−0.006	−0.007	−0.029*	−0.031*	0.004	0.004
visited a museum last 12 month	0.079***	0.079***	0.091***	0.092***	0.073***	0.073***
no. of books at home/10	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
immigrant origin (ref.: native)						
turkish	0.208***	0.207***	0.214***	0.213***	0.188***	0.187***
former Soviet Union	0.128***	0.130***	0.123***	0.127***	0.109***	0.110***
former Yugoslavia	0.133***	0.136***	0.119***	0.123***	0.125***	0.128***
polish	0.235***	0.238***	0.262***	0.265***	0.205***	0.207***
other	0.091***	0.094***	0.107***	0.110***	0.068***	0.070***
context effects						
East Germany	−0.366***	−0.370***	−0.343***	−0.347***	−0.388***	−0.391***
% Muslims	0.002***	0.001*	0.002***	0.000	0.002***	0.001*
% Muslims X Muslims	–	0.004***	–	0.006***	–	0.003***
Constant	0.922***	0.914***	0.892***	0.880***	0.878***	0.874***
L. 3: Var(Cons.), 55 areas	.0061***	.0060***	.0064***	.0063***	.0059***	.0058***
L. 2: Var(Cons.), 2012 clas.	.0077***	.0075***	.0074***	.0072***	.0098***	.0097***
L. 2: Var(musl., rel.)	.0000	.0000	.0000	.0000	.0000	.0000
L. 1: Var(e)	.1455***	.1453***	.1544***	.1542***	.1322***	.1322***
Observations	31201	31201	15457	15457	15744	15744

+p < .1, *p < .05, **p < .01, ***p < .001.

Table A3. Correlation of main variables, all $p \leq 0.01$.

	slap daughter in face	Muslim, religious	Muslim, not religious	other religion, religious	girl	% religious muslims	% non-religious muslims	% religious other
slap daughter in face	1.00							
Muslim, religious	0.21	1.00						
Muslim, not religious	0.03	−0.02	1.00					
other religion, religious	0.00	−0.15	−0.04	1.00				
girl	−0.08	0.00	0.00	0.04	1.00			
% religious muslims	0.17	0.43	0.04	−0.03	−0.02	1.00		
% non-religious muslims	0.04	0.07	0.26	−0.02	−0.01	0.17	1.00	
% religious other	−0.01	−0.06	−0.02	0.30	0.06	−0.15	−0.08	1.00