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## ORIGINAL RESEARCH ARTICLE

# Social Norms and Adolescents' Sexual Health: An Introduction for Practitioners Working in Low and Mid-income African countries

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## Abstract

Donors, practitioners and scholars are increasingly interested in harnessing the potential of social norms theory to improve adolescents' sexual and reproductive health outcomes. However, social norms theory is multifaceted, and its application in field interventions is complex. An introduction to social norms that will be beneficial for those who intend to integrate a social norms perspective in their work to improve adolescents' sexual health in Africa is presented. First three main schools of thought on social norms, looking at the theoretical standpoint of each, are discussed. Next, the difference between two important types of social norms (descriptive and injunctive) is explained and then the concept of a "reference group" is examined. The difference between social and gender norms are then considered, highlighting how this difference is motivated by existing yet contrasting approaches to norms (in social psychology and gender theory). In the last section, existing evidence on the role that social norms play in influencing adolescents' sexual and reproductive health are reviewed. Conclusions call for further research and action to understand how norms affecting adolescents' sexual and reproductive health and rights (SRHR) can be changed in sub-Saharan Africa. (*Afr J Reprod Health* 2018; 22[1]: 38-46).

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**Keywords:** Health Interventions; Health Promotion; Social Norms; Low-income countries; Adolescents; Sexual and Reproductive Health

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## Résumé

Les donateurs, les praticiens et les chercheurs s'intéressent de plus en plus à exploiter le potentiel de la théorie des normes sociales pour améliorer les résultats en matière de santé sexuelle et de la reproduction chez les adolescents. Cependant, la théorie des normes sociales a plusieurs facettes et son application dans les interventions sur le terrain est complexe. Une introduction aux normes sociales qui seront bénéfiques pour ceux qui ont l'intention d'intégrer une perspective de normes sociales dans leur travail pour améliorer la santé sexuelle des adolescents en Afrique est présentée. L'étude a discuté les trois principales écoles de pensée sur les normes sociales, en examinant le point de vue théorique de chacune. Ensuite, la différence entre deux types importants de normes sociales (descriptive et injonctive) est expliquée, puis le concept de «groupe de référence» a été examiné. La différence entre les normes sociales et de genre est ensuite considérée, soulignant comment cette différence est motivée par des approches existantes mais contrastées des normes (en psychologie sociale et en théorie du genre). Dans la dernière section, les preuves existantes sur le rôle que les normes sociales jouent dans l'influence de la santé sexuelle et de la reproduction chez les adolescents sont passées en revue. Les conclusions appellent des recherches et des actions supplémentaires pour comprendre comment les normes affectant la santé et les droits sexuels et de la reproduction chez les adolescents (SDSR) peuvent être modifiées en Afrique subsaharienne. (*Afr J Reprod Health* 2018; 22[1]: 38-46).

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**Mots-clés:** Interventions sanitaires, promotion de la santé, les normes sociales, les pays à faible revenu, adolescents, santé sexuelle et de la reproduction

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## Introduction

Scholars and practitioners from high-income countries are increasingly integrating social norms

strategies to address a variety of health-related behaviours. However, we have found little reference to norms in the platforms available to practitioners from low and mid-income African

countries working on adolescents' health and reproductive rights. In this paper, we aim to provide an introduction to social norms theory for practitioners working to improve adolescents' reproductive health in Africa. We detail main distinctions across schools of thoughts in the social norms literature, briefly discuss the difference between social norms and gender norms, and then present recent advancement in social norms theory. Before some brief concluding remarks, we review key studies on norms and adolescents' sexual reproductive health and rights (SRHR) (some of which are from low and mid-income African countries).

Despite the fact that social norms are one of the most widely studied drivers of human behaviour, scholars who study social norms disagree on what they are, how they sustain behaviour, and how they can be changed. Most theoretical studies that look at social norms acknowledge that complexity. Article titles such as: "Norms: the problem of definition and classification"<sup>1</sup>; "What is a social norm?"<sup>2</sup>; "An Explanation of Social Norms"<sup>3</sup>; "Explaining Norms"<sup>4</sup>; are common within the literature. The great variety of approaches and theoretical standpoints can generate confusion for those who want to apply social norms theory to real-life problems.

An important introductory distinction is that between legal, moral, and social norms. Legal norms are mostly written rules – laws and regulations, for instance – enforced by formal organisms (such as the State) with the authority to prosecute non-compliers<sup>5-7</sup>. Moral norms are instead internally-driven, value-based motivators of behaviour, that push individuals to behave in compliance with ideal states for self and the world<sup>8</sup>. Social norms, finally, are context-dependent, externally-derived rules of obligatory, appropriate, and acceptable behaviour shared by people in the same group or society<sup>9-11</sup>.

Even though these three types of norms are often presented as different theoretical constructs, in practice many connections exist between them. Legal and social norms can influence each other, both positively (when one

causes the shift and realignment of the other) and negatively (when one "crowds out" the other). While the law, if enforced, might overtime contribute to a shift in the norm (think of the change in acceptability of smoking in restaurants), laws that are too far from the norm might not be respected<sup>12</sup>. That is, people might not follow a specific law because it seems unreasonable or unrealistic to them, and they believe nobody else will. Also, while enforcement of the law requires the institutional capacity to enforce that law, respect of the law requires a social norm of legal obedience. That is, when people believe that nobody in their region or country respects the law (or that everybody follows customary rules but not State law), law compliance requires the strengthening of the belief that State law are respected<sup>13</sup>.

Commentators have argued that moral and social norms are deeply linked, with some suggesting that their distinction is not easily drawn<sup>14</sup>. Haidt<sup>15</sup>, for instance, suggested that evolution shaped our "moral senses," so that all human beings share the same moral emotions, but that the trigger-events for those emotions are socially constructed.

### ***Three main theoretical perspectives on social norms***

In the literature, there exist three main perspectives on social norms: norms as behavioural regularities, norms as clusters of attitudes, and norms as social beliefs. In this paper, we adopt the last of these approaches, but look briefly at the first two.

#### ***Social norms as behavioural regularities***

Early work on social norms (mostly emerging from the fields of sociology and economics) defined them as practices shared across individuals, that emerge through repetition of behaviours<sup>16</sup>. However, as several commentators have observed, behavioural regularities might be due to factors other than normative. In certain parts of the world, for instance, most marriages might take place in June not because there is a

norm demanding that people should do so, but because that's when the weather is at its best<sup>17</sup>. Similarly, most people drink water, but they don't do so motivated by the belief that others do as well, just because they are thirsty.

### ***Social norms as clusters of attitudes***

Another school of thought in social norms theory defines social norms as the attitudes that people share in a given group<sup>4</sup>. However, the idea that norms can be understood as clusters of attitudes has limited applicability when people act against their own individual attitude, under the false belief they are aligning their actions with the attitudes of others. This dynamic (in which people falsely believe others have attitudes different from their own) is a well-studied phenomenon in social psychology called *pluralistic ignorance*<sup>18, 19</sup>. The norms as attitudes school is not helpful for practitioners dealing with cases of pluralistic ignorance and, for both measurement and programmatic purposes, is less complete than those approaches that explain why people behave against their own and (unwittingly) other people's individual attitudes.

### ***Social norms as social beliefs***

A third school of thought on social norms emerged from empirical findings primarily originating from studies in social psychology. In this school of thought, the work by Cialdini and colleagues has been path-breaking<sup>20-23</sup>. Their theory identifies two types of social norms as beliefs: 1) one's belief about what others typically do in a situation X; and 2) one's belief about what actions other people approve and disapprove in a situation X. These scholars called beliefs of the first type *descriptive* norms, and beliefs of the second type *injunctive* norms<sup>21</sup>. Some commentators have suggested that social norms only exist when both beliefs are active. Bicchieri<sup>24</sup>, for instance, spoke of social norms as being the function of both empirical expectations (what I think others do) and normative expectations (what I think others think I should

do). Even though these theories vary in the words they use to define social norms, they agree on the basic premise that both individuals' beliefs about what others do and beliefs about what others approve of influence individuals' choices and actions. This paper adopts Cialdini's terminology of descriptive and injunctive norms.

### ***Descriptive and injunctive norms as behavioural drivers***

Descriptive and injunctive norms can be powerful drivers of behaviour. Experts in public advertisement have for many years exploited the power of descriptive norms to influence consumers' behaviour: when people believe that many others are doing something, they will be more favourably oriented towards, or even compelled to do the same. Much of the empirical evidence on the influence of descriptive norms comes from studies conducted in high-income countries, many of which were carried out by researchers interested in: 1) increasing pro-environmental behaviour<sup>25-28</sup>; and 2) reducing consumption of alcohol in university campuses<sup>29-34</sup>. Injunctive norms have also been studied as influential drivers of human behaviour, and as with descriptive norms, have been used frequently in advertisements that strive to shape ideas of what consumers should do to be popular, likeable, or accepted by others ("drinking this beer will make a real man of you", or "using that mascara will make you more popular"). Studies that look exclusively at injunctive norms do exist<sup>35,36</sup>, although empirical researchers more commonly integrate analysis of both injunctive and descriptive norms in their studies.

The evidence is mixed about which of the two types of norms has stronger influence; differences in their strength might be due to the behaviour being influenced, as well as the characteristics of the population being influenced by the norm (age, gender, or economic status), the relationship between the influencers and the influenced (perceived social distance or proximity), and the characteristics of the context in which the influenced live (urban or rural, familiar or unfamiliar, for instance)<sup>27,37,38</sup>.

### ***The role of the “reference group”***

Scholars from various disciplines have been familiar with the concept of a *reference group* for more than half a century<sup>39-43</sup>. Even before social norms theory had emerged as field of research and practice, some scholars had started to propose a “reference group theory,” arguing that individuals’ behaviours are influenced by the behaviour of the group. In its earlier definition, a reference group was understood as the specific group of people that influence how individuals “think, feel, and see things”<sup>40</sup>.

Studies have shown that group membership can indeed act as a strong motivator for following the groups’ behaviour. A group is likely to exert a stronger influence on behaviour particularly when one identifies with that group<sup>44,45</sup>. Some theorists have further argued that one’s normative beliefs are projected onto a given reference group of people that matter to them when carrying out a given action<sup>24,46</sup>. Different reference groups can matter in different situations or for different actions behaviours. However, as Cialdini<sup>47</sup> observed, the behaviour of others can be normative even when the group is not particularly meaningful, as, for instance, in the street, where we might align our behaviour to what we believe is appropriate in front of complete strangers<sup>48,49</sup>.

### ***Mechanisms of norm compliance***

There is no widely shared agreement on why people comply with social norms. There are six main mechanisms that provide convincing explanations for people’s tendency to comply with norms. The theories behind each of these mechanisms are varied and sometimes overlapping or contrasting. Attempts at comprehensive reviews exist elsewhere<sup>10</sup>. We offer here a simplified version as an introduction.

#### ***Socialisation, internalisation and automaticity***

Psychological theories of social learning posit that social norms are learnt in the day to day interactions that humans have as children and

adolescents<sup>50</sup>. As children learn them throughout their development, norms become connected to feelings of shame and guilt that are triggers of appropriate behaviour<sup>51</sup>. In most of these cases, compliance with norms becomes automatic, rather than the result of internal rational deliberation<sup>52,53</sup>.

#### ***Social identity***

Norms’ compliance can express group membership. For instance, a group of adolescents might share how they dress, talk, and more generally behave because they connect those actions to their sense of self in the group<sup>54,55</sup>.

#### ***Power***

Norms’ compliance can be enforced by power holders invested in maintaining the social status quo<sup>56,57</sup>. Others less powerful might not have the resources required to challenge the norm (authority, credibility, visibility, money, or relational network, for instance).

#### ***Solving social dilemmas***

Norms can help solve social dilemmas that require coordination or cooperation<sup>58,59</sup>. Coordination allows people to achieve individual goals that require synchronising with the behaviour of others. An example can be found in the spread of fax machines in the late 80s: every person wants to communicate, but they will use faxes only if most others do. Cooperation instead allows people to achieve collective goals benefitting them as a group (often when their individual interests would be conflicting). Take, for instance, a group of fishermen who fish in the same lake. It’s in their individual interest to overfish (they earn more money) but if everyone does there will be no more fish in the lake. A norm against overfishing will allow them to carry on their activity sustainably.

#### ***Punishments and rewards***

Finally, norms compliance can be motivated by the fear of social punishments and rewards for non-compliers and compliers respectively<sup>60,61</sup>.

Rewards might include praising, promotions, being recognised as a member of an elite group, and punishments might include gossip, disapproval, isolation, and potentially even death.

### ***Recent advancements in the “norms as belief” approach***

#### ***Norms are on a spectrum of influence***

Cislaghi and Heise<sup>9</sup> argued that the strength of a norm varies according to four characteristics of a practice: 1) its detectability; 2) its interdependence; 3) it being held in place by proximal norms; and 4) its likelihood of resulting in sanctions. They suggest that there are four possible types of influence that norms can have: 1) they can make a practice *obligatory* (taking the example of female genital cutting); 2) they can make it *appropriate* (as in the case of an adolescent smoking to impress a group of friends); 3) they can make it *tolerated* (as in the case of littering); or 4) by exposing a person to a new attitude or behaviour, they can expand what is *possible* (as it happens, for instance, in the diffusion of a new technology).

#### ***Effective change requires embedding norms within an integrated framework of influence***

If norms operate along a spectrum, they do not exert exclusive influence on a given behaviour, but interact with other (material, institutional, social, and individual) factors in affecting the persistence of a practice or a behaviour<sup>62-64</sup>.

#### ***The influence of social norms is often underestimated by actors***

Social Influence in general is underestimated<sup>65</sup> or unrecognised by actors<sup>25</sup>. When asked about the reasons they do something, not many might realise or admit that they are under the influence of norms. That has obviously major implications for social norms measurement and diagnosis. Social network analysis, by measuring the similarity between the attitudes and behaviours of socially connected people, can be an important

tool for uncovering those underreported dynamics.

### ***Social norms and gender norms***

Particularly relevant for adolescents' SRHR are gender norms. Practitioners working in this area, while perhaps unfamiliar with the theories presented so far, will be familiar with gender norms. There currently exists a gap between these two fields of research and practice; the language, approaches and perspectives used in the “gender theory” approach need more harmonisation with those used in the nascent “social norms approach” to international development. On the one end are practitioners interested in challenging patriarchy, for whom transforming gender norms becomes part of the larger project of achieving gender equity. On the other end, there are donors and practitioners who, while less focused specifically on gender, began to apply the social norms theory to gender-related harmful practices. Even though the two fields of theory and practice are now intersecting, much remains to be done to develop a common vocabulary that would allow greater collaboration.

### ***Social norms and SRHR***

Much evidence exists around the role that social norms play in influencing adolescents' health-related behaviour<sup>66-69</sup>. There also is a body of literature specifically on adolescent sexual behaviour and social norms in high-income countries, including many papers utilizing social network analysis as a way to capture peer effects. One sharp contribution is in the work by Mollborn<sup>70,71</sup>, who conducted a large qualitative study with adolescent students in the US, and identified bundles of norms (at times contradictory) that would variably stretch or restrict the space for adolescents' agency in negotiating sex. The two most comprehensive papers in the available literature are 1) a systematic review and 2) a qualitative synthesis of the norms affecting adolescents' SRHR<sup>72,73</sup>. The review investigated the associations between descriptive and injunctive norms, and sexual

activity<sup>73</sup>. The authors found that adolescent sexual activity was more strongly associated with descriptive norms than with injunctive norms. However, gender, age, and the socio-cultural context had a significant moderating effect. The qualitative synthesis found that adolescents focus more on the social rewards that sex brings to them, and less on health risk. The authors also found that adolescents reproduce dominant gender norms in how they talk about sexual behaviour and sexual decision-making<sup>72</sup>.

Much of the available research on social norms and adolescents' SRHR focuses on sexual initiation. Even though many of these studies did not specifically measure social norms, results point towards the effect of these norms on adolescents' sexual behaviour. A series of studies showed that the age of sexual initiation of one's adolescents' peers is a strong predictor of one's age of sexual initiation, controlling for other factors<sup>74-78</sup>. Teitler and Weiss<sup>79</sup>, for instance, found that while school level sexual initiation predicts individual adolescent sexual initiation, the school level perceived norms regarding the acceptable age for sexual initiation was a significant predictor of individual age at initiation controlling for students own attitudes. The effect of norms on adolescents' SRHR is not limited to sexual debut: studies have found similar relations between peers' contraceptive use and one's use<sup>80</sup> and even peers' experience of sexual violence and one's experience<sup>81</sup>. The effect of social norms on adolescents' sexuality differs by gender. A recent study conducted in Uganda, for instance, showed that, while boys who have reported a multitude of sexual partners achieve popularity, girls who have reported a multitude of sexual partners are more likely to be ostracized<sup>82</sup>. While research on what works to change social norms to improve adolescent sexual health in sub-Saharan Africa is still growing, evidence exists that norms play an important role in the way adolescents make decisions about sexuality in these contexts. Research in South Africa, for instance, has highlighted the impact of peer opinions on adolescent condom use<sup>83,84</sup>. Other work has identified the role of social norms in the

perpetration of sexual violence amongst South African youth<sup>85</sup>, transactional sex in sub-Saharan Africa<sup>86</sup>, and multiple partnerships and early sexual initiation amongst adolescents in South Africa<sup>84</sup>.

## Conclusions

The usefulness of theoretical approaches that see social norms as people's beliefs about what others do and approve of have been highlighted. This is offered as an introduction to researchers and practitioners who intend to integrate a social norms perspective within their work in sub-Saharan Africa. Recent findings suggest that a similar endeavour can bear promising results<sup>87</sup>. In spite of some evidence on the role that social norms play in influencing adolescents' sexual behaviour, little is available on what works to change social norms to improve adolescents' SRHR in low and mid-income African countries. Future research and practice should further investigate the dynamics of normative influence and its change in these countries, particularly the ways in which social norms change intersects with change in other institutional, material, social and individual factors that contribute to sustaining harmful practices.

## References

1. Gibbs JP. Norms: The Problem of Definition and Classification. *American Journal of Sociology*. 1965;70(5):586-94.
2. Shaffer LS. Toward Pepitone's Vision of a Normative Social Psychology: What is a Social Norm? *The Journal of Mind and Behavior*. 1983;4(2):275-93.
3. Lapinski MK and Rimal RN. An Explication of Social Norms. *Communication Theory*. 2005;15(2):127-47.
4. Brennan G, Eriksson L, Goodin RE and Southwood N. *Explaining norms*. Oxford: Oxford University Press; 2013. 1 volume p.
5. Huang PH and Wu H-M. More Order without More Law: A Theory of Social Norms and Organizational Cultures. *Journal of Law, Economics, & Organization*. 1994;10(2):390-406.
6. Anderson E. Beyond Homo Economicus: New Developments in Theories of Social Norms. *Philosophy and Public Affairs*. 2000;29(2):170-200.
7. Elsenbroich C and Gilbert N. *Modelling Norms*.

- Elsenbroich C, Gilbert N, editors. Amsterdam: Springer Netherlands; 2014 2014/01/01. 15-39 p.
8. Turiel E. The Culture of Morality: Social Development, Context, and Conflict. Cambridge: Cambridge University Press; 2002.
  9. Cislaghi B and Heise L. Four avenues of normative influence. *Health Psychology*. 2018.
  10. Bell DC and Cox ML. Social Norms: Do We Love Norms Too Much? *Journal of Family Theory Review*. 2015 Mar 01;7(1):28-46. PubMed PMID: 25937833. PMCID: PMC4412469. Epub 2015/05/06.
  11. Mackie G, Moneti F, Shakya H and Denny E. What are Social Norms? How are they measured? 2015.
  12. Stuntz W. Self-Defeating Crimes. *Virginia Law Review*. 2000;86:1871-82.
  13. Mackie G. Effective Rule of Law Requires Construction of a Social Norm of Legal Obedience. In: Tognato C, editor. *Rethinking Cultural Agency: The Significance of Antanas Mockus*. Cambridge: Harvard University Press; 2015.
  14. Dubreuil B and Grégoire J-F. Are moral norms distinct from social norms? A critical assessment of Jon Elster and Cristina Bicchieri. *Theory and Decision*. 2012;75(1):137-52.
  15. Haidt J. The Moral Mind: How 5 Sets of Innate Intuitions Guide the Development of Many Culture-Specific Virtues, and Perhaps Even Modules. In: Carruthers P, Laurence S, Stich S, editors. *The Innate Mind*. New York: Oxford University Press; 2007. p. 367-91.
  16. Bettenhausen K and Murnighan K. The Emergence of Norms in Competitive Decision-Making Groups. *Administrative Science Quarterly*. 1985;30(1985):350-72.
  17. Labovitz S and Hagedorn R. Measuring Social Norms. *The Pacific Sociological Review*. 1973;16(3):283-303.
  18. Katz D and Allport FH. *Student Attitudes*. Syracuse, N.Y: Craftsman; 1931.
  19. Prentice DA and Miller DT. Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology*. 1993 (64):243-56.
  20. Cialdini RB and Goldstein NJ. Social influence: compliance and conformity. *Annu Rev Psychol*. 2004;55:591-621. PubMed PMID: 14744228.
  21. Cialdini RB, Kallgren CA and Reno RR. A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. *Advances in experimental social psychology*. 1991;24(20):1-243.
  22. Cialdini RB and Trost MR. Social influence: Social norms, conformity and compliance. In: Gilbert DT, Fiske ST, Lindzey G, editors. *The handbook of social psychology*. II. New York: McGraw-Hill; 1998. p. 367-91.
  23. Schultz PW, Nolan JM, Cialdini RB, Goldstein NJ and Griskevicius V. The constructive, destructive, and reconstructive power of social norms. *Psychol Sci*. 2007 May;18(5):429-34. PubMed PMID: 17576283.
  24. Bicchieri C. *The Grammar of Society*. Cambridge: Cambridge University Press; 2006.
  25. Griskevicius V, Cialdini RB and Goldstein NJ. Social Norms: An Underestimated And Underemployed Lever For Managing Climate Change *International Journal for Sustainability Communication*. 2008;3:5-13.
  26. Priolo D, Milhabet I, Codou O, Fointiat V, Lebarbenchon E and Gabarrot F. Encouraging ecological behaviour through induced hypocrisy and inconsistency. *Journal of Environmental Psychology*. 2016;47:166-80.
  27. Hamann KRS, Reese G, Seewald D and Loeschinger DC. Affixing the theory of normative conduct (to your mailbox): Injunctive and descriptive norms as predictors of anti-ads sticker use. *Journal of Environmental Psychology*. 2015;44:1-9.
  28. de Groot JIM and Schuitema G. How to make the unpopular popular? Policy characteristics, social norms and the acceptability of environmental policies. *Environmental Science & Policy*. 2012;19-20:100-7.
  29. Borsari B and Carey KB. Descriptive and Injunctive Norms in College Drinking: A Meta- Analytic Integration. *Journal of Studies on Alcohol*. 2003;64(3):331-41.
  30. Prestwich A, Kellar I, Conner M, Lawton R, Gardner P and Turgut L. Does changing social influence engender changes in alcohol intake? A meta-analysis. *Journal of Consulting and Clinical Psychology*. 2016;84(10):845-60.
  31. Reilly DW and Wood MD. A randomized test of a small-group interactive social norms intervention. *J Am Coll Health*. 2008 Jul-Aug;57(1):53-60. PubMed PMID: 18682346.
  32. Dams-O'Connor K, Martin JL and Martens MP. Social norms and alcohol consumption among intercollegiate athletes: the role of athlete and nonathlete reference groups. *Addictive Behavior*. 2007 Nov;32(11):2657-66. PubMed PMID: 17544589.
  33. Perkins HW. Social Norms and the Prevention of Alcohol Misuse in Collegiate Contexts. *Journal of Studies on Alcohol*. 2002;14.
  34. Perkins HW and Berkowitz A. Perceiving the community norms of alcohol use among students: Some research implications for campus alcohol education programming. *International Journal of the Addictions*. 1986;21:961-76.
  35. Prince MA and Carey KB. The malleability of injunctive norms among college students. *Addict Behav*. 2010 Nov; 35(11):940-7. PubMed PMID: 20598806. PMCID: PMC2929486.



36. Taylor CA and Sorenson SB. Injunctive social norms of adults regarding teen dating violence. *J Adolesc Health*. 2004 Jun;34(6):468-79. PubMed PMID: 15145404.
37. Smith JR, Louis WR, Terry DJ, Greenaway KH, Clarke MR and Cheng X. Congruent or conflicted? The impact of injunctive and descriptive norms on environmental intentions. *Journal of Environmental Psychology*. 2012;32(4):353-61.
38. Bosson JK, Parrott DJ, Swan SC, Kuchynka SL and Schramm AT. A dangerous boomerang: Injunctive norms, hostile sexist attitudes, and male-to-female sexual aggression. *Aggress Behav*. 2015 Nov-Dec;41(6):580-93. PubMed PMID: 26174353.
39. Hyman HH. Reflections on Reference Groups. *Public Opinion Quarterly*. 1960;24:383-96.
40. Saxena DP. The "Reference Group" Concept. *Social Science*. 1971;46(3):155-64.
41. Sherif M and Cantrill H. *The Psychology of Ego Involvements*. New York: Wiley; 1947.
42. Merton RK and Kitt AS. Reference Group. In: Merton RK, Lazarsfeld PF, editors. *Continuities in Social Research*. Glencoe, Illinois: Free Press; 1950.
43. Nelson HA. A Tentative Foundation for Reference Group Theory. *Sociology and Social Research*. 1961;45:274-80.
44. Terry DJ, Hogg MA and McKimmie BM. Attitude-behaviour relations: the role of in-group norms and mode of behavioural decision-making. *British Journal of Social Psychology*. 2000 Sep;39:337-61. PubMed PMID: 11041007.
45. Terry DJ, Hogg MA and White KM. The theory of planned behaviour: self-identity, social identity and group norms. *Br J Soc Psychol*. 1999 Sep;38 ( Pt 3):225-44. PubMed PMID: 10520477.
46. Park HS and Smith SW. Distinctiveness and Influence of Subjective Norms, Personal Descriptive and Injunctive Norms, and Societal Descriptive and Injunctive Norms on Behavioral Intent: A Case of Two Behaviors Critical to Organ Donation. *Human Communication Research*. 2007;33(2):194-218.
47. Reid AE, Cialdini RB and Aiken LS. Social Norms and Health Behavior. In: Steptoe A, editor. *Handbook of Behavioral Medicine*. New York: Springer; 2010. p. 263-71.
48. Cialdini RB, Reno RR and Kallgren CA. A Focus Theory of Normative Conduct: Recycling the Concept of Norms to Reduce Littering in Public Places. *Journal of Personality and Social Psychology*. 1990;58(6):1015-26.
49. Munger K and Harris SJ. Effects of an observer on handwashing in a public restroom. *Perceptual and Motor Skills*. 1989;69:733-4.
50. Maccob EE. Historical Overview of Socialization Research and Theory. In: Grusec JE, Hastings PD, editors. *Handbook of Socialization*. New York: Guilford Press; 2007.
51. Elster J. *Explaining Social Behaviour, More Nuts and Bolts for the Social Sciences*. Cambridge: Cambridge University Press; 2007.
52. Wyer RSJ. *The Automaticity of Everyday Life*. New York: Psychology Press; 2014.
53. Bargh JA and Williams EL. The Automaticity of Social Life. *Current Directions in Psychological Science*. 2006;15(1):1-4.
54. Hogg MA and Reid SA. Social Identity, Self-Categorization, and the Communication of Group Norms. *Communication Theory*. 2006;16(1):7-30.
55. Turner JC, Hogg M, Oakes P, Reicher S and M W. *Rediscovering the social group: A self-categorisation theory*. Oxford: Basil Blackwell; 1987.
56. Guala F. Reciprocity: weak or strong? What punishment experiments do (and do not) demonstrate. *Behav Brain Sci*. 2012 Feb;35(1):1-15. PubMed PMID: 22289303.
57. Horne C. Explaining Norm Enforcement. *Rationality and Society*. 2007;19(2):139-70.
58. Cronk L and Leech BL. Meeting at Grand Central : understanding the social and evolutionary roots of cooperation. Princeton, N.J. ; Oxford: Princeton University Press; 2013. xi, 246 p. p.
59. Fehr E and Fischbacher U. Social norms and human cooperation. *Trends Cogn Sci*. 2004 Apr;8(4):185-90. PubMed PMID: 15050515.
60. Morris MW, Hong Y-y, Chiu C-y and Liu Z. Normology: Integrating insights about social norms to understand cultural dynamics. *Organizational Behavior and Human Decision Processes*. 2015;129:1-13.
61. Young HP. The Evolution of Social Norms. *Annual Review of Economics*. 2015;7(1):359-87.
62. Cislaghi B and Heise L. *Measuring Gender-related Social Norms: Report of a Meeting, Baltimore Maryland, June 14-15, 2016*. London: LSHTM; 2017.
63. Rimal RN. An empirical test of some moderators of social norms influence. *Learning Collaborative on Social Norms and Adolescents' Sexual and Reproductive Health; Washington DC*2016.
64. Cislaghi B and Heise L. *Theory and Practice of Social Norms Interventions: Eight Common Pitfalls*. 2018;Health Promotion International.
65. Cialdini RB. Basic Social Influence Is Underestimated. *Psychological Inquiry*. 2005;16(4):158-61.
66. Stark L, Asghar K, Seff I, Cislaghi B, Yu G, Gessesse TT, Eoomkham J, Baysa AA and Kahtrine F. How gender- and violence-related norms affect self-esteem among adolescent refugee girls living in Ethiopia. *Global Mental Health*. 2018;17(5).
67. Albert D, Chain J and Steinberg L. The Teenage Brain: Peer Influences on Adolescent Decision Making. *Curr Dir Psychol Sci*. 2013 Apr;22(2):114-20. PubMed PMID: 25544805. PMCID: PMC4276317.

68. Eisenberg ME, Neumark-Sztainer D, Story M and Perry C. The role of social norms and friends' influences on unhealthy weight-control behaviors among adolescent girls. *Soc Sci Med.* 2005 Mar;60(6):1165-73. PubMed PMID: 15626514.
69. Biddle BJ, Bank BJ and Marlin MM. Parental and Peer Influence on Adolescents. *Social Forces.* 1980;58(4):1057-79.
70. Mollborn S. Predictors and Consequences of Adolescents' Norms against Teenage Pregnancy. *Sociol Q.* 2010 Spring;51(2):303-28. PubMed PMID: 21921969. PMCID: PMC3172313.
71. Mollborn S. *Mixed Messages.* Oxford: Oxford University Press; 2016.
72. Templeton M, Lohan M, Kelly C and Lundy L. A systematic review and qualitative synthesis of adolescents' views of sexual readiness. *Journal of Advanced Nursing.* 2016;73(6):1288-301.
73. Van de Bongardt D, Reitz E, Sandfort T and Dekovic M. A Meta-Analysis of the Relations Between Three Types of Peer Norms and Adolescent Sexual Behavior. *Pers Soc Psychol Rev.* 2015 Aug;19(3):203-34. PubMed PMID: 25217363.
74. Ali MM and Dwyer DS. Estimating peer effects in sexual behavior among adolescents. *Journal of adolescence.* 2011;34(1):183-90.
75. Fletcher JM. Social multipliers in sexual initiation decisions among US high school students. *Demography.* 2007;44(2):373-88.
76. Jeon KC and Goodson P. US adolescents' friendship networks and health risk behaviors: a systematic review of studies using social network analysis and Add Health data. *PeerJ.* 2015;3:e1052.
77. Ajilore O. Identifying peer effects using spatial analysis: the role of peers on risky sexual behavior. *Review of Economics of the Household.* 2015;13(3):635-52.
78. Miranda-Diaz M and Corcoran K. "All my friends are doing it:" The Impact of the Perception of Peer Sexuality on Adolescents' Intent to have Sex. *Journal of evidence-based social work.* 2012;9(3):260-4.
79. Teitler JO and Weiss CC. Effects of neighborhood and school environments on transitions to first sexual intercourse. *Sociology of Education.* 2000:112-32.
80. Ali MM, Amialchuk A and Dwyer DS. Social network effects in contraceptive behavior among adolescents. *Journal of Developmental & Behavioral Pediatrics.* 2011;32(8):563-71.
81. Shakya HB, Fariss CJ, Ojeda C, Raj A and Reed E. Social Network Clustering of Sexual Violence Experienced by Adolescent Girls. *Am J Epidemiol.* 2017;186(7):796-804.
82. Muhanguzi FK. Gender and Sexual Vulnerability of Young Women in Africa: Experiences of Young Girls in Secondary Schools in Uganda. *Culture, Health & Sexuality.* 2011;13(6):713-25.
83. MacPhail C and Campbell C. 'I think condoms are good but, aai, I hate those things': condom use among adolescents and young people in a Southern African township. *Social science & medicine.* 2001;52(11):1613-27.
84. Selikow TA, Ahmed N, Flisher AJ, Mathews C and Mukoma W. "I am not `umqwayito": A qualitative study of peer pressure and sexual risk behaviour among young adolescents in Cape Town, South Africa. *Scand J Public Health.* 2009;37(2\_suppl):107-12.
85. Eaton L, Flisher AJ and Aarø LE. Unsafe sexual behaviour in South African youth. *Social science & medicine.* 2003;56(1):149-65.
86. Luke N and Kurz K. *Cross-generational and transactional sexual relations in sub-Saharan Africa.* Washington, DC: International Center for Research on Women (ICRW). 2002.
87. Lundgren R and Amin A. Addressing intimate partner violence and sexual violence among adolescents: emerging evidence of effectiveness. *J Adolesc Health.* 2015 Jan;56(1 Suppl):S42-50. PubMed PMID: 25528978.