**Belief Change Under Conditions of Moral Conviction**

1. Can support for highly polarized positions, with strong moral conviction be ‘demoralized’ via a pragmatic/nonmoral argument?
2. Can we increase the effectiveness of social consensus on changing support for highly polarized positions by reducing perceived moral conviction?

Many issues exist where people disagree, some are simple matters of preference (Coke vs. Pepsi) and others are matters of convention that society has agreed upon (driving on the right/left in the U.S./UK). However, some beliefs are rooted in the perception that a given stance is fundamentally right or wrong, based on a moral principle connected to core beliefs and convictions. We define this as ‘Moral Conviction’. For example, a pro-choice supporter whose belief is tied to the perception that women have a fundamental right to bodily self-determination. One fundamental characteristic of beliefs held with ‘Moral Conviction’ is that historically, these beliefs are more difficult to change as compared to beliefs grounded in preference or social convention (Skitka et al., 2021). Considering that many stances on some of the most important issues today (e.g., Israel-Palestine conflict, Abortion, climate change, etc.) are grounded in moral conviction, understanding how to affect belief change is critical.

Given the difficulty of changing attitudes for morally convicted beliefs, one promising avenue of research is work on attitude ‘demoralization’, meaning a reduction in the strength of moral conviction that one holds towards a belief. Conceptually, if morally convicted beliefs are hard to change, characterizing a belief in a non-moral framework should lead to greater potential for attitude change. However, there is mixed evidence that this is effective, some research has shown that moral conviction can be successfully reduced by framing arguments using pragmatic or economic counter-arguments (Kodapanakkal et al., 2022, Kutlaca, 2013), while other research has shown that morally convicted individuals are resistant to nonmoral counter-arguments, and instead, more open to moralized counter-arguments (Luttrell et al., 2019). Conceptually, we are interested in replicating these studies and determining whether moral or nonmoral appeals are more effective at changing belief, and furthermore, if this is mediated by a reduction in perceived moral convictions.

Another plausible approach for attitude change in conditions of moral conviction would be to leverage social influence. One of the strongest findings in psychology is that people conform towards the consensus group opinion (Asch, 1956; Deutsch M, 1955). However, one aspect of morally convicted beliefs that sets them apart from simple ‘strongly held’ beliefs, is that they appear to be independent of normative/majority influence (Skitka et al., 2005). This makes sense, considering that these beliefs are due to moral conviction, rather than social convention. Furthermore, this indicates that if de-moralization is successful, social pressure likewise could be successful in attitude change.

We plan on conducting a series of experiments. First, we seek to determine if we can successfully use moral or nonmoral arguments to affect attitude change, and additionally, if these arguments lead to increased or decreased moral conviction. Next, we seek to determine if we can successfully experimentally manipulate perceptions of social consensus, in order to set us up for our last study. Finally, we wish to know if experimentally decreased moral conviction results in increased susceptibility to the effects of the social consensus manipulation we developed in the previous study. Ideally, we could determine whether we can directly affect attitude change using moral/nonmoral arguments, and if that is not successful, we would want to know if we could successfully de-moralize individuals, and thus change their attitudes using social pressures.

DO A GRAPH THAT SHOWS PREDICTED THEORETICAL OUTCOMES

USE A DEFINITION THAT IS ABOUT OBJECTIVE/UNIVERSALITY

ADD QUESTIONS THAT DIRECTLY ASK ABOUT OBJECTIVITY AND UNIVERSALITY

WHAT MAKES ME WANT TO PURSUE IT IF THERE IS MIXED EVIDENCE?

WHY DIDN”T IT WORK…WHAT COULD WE DO DIFFERENTLY TO MAKE IT WORTH CONTINUE TO LOOKING AT?

THE INTERVENTION WASN”T SUCCESSFUL, BECAUSE IT DIDN”T ACTUALLY REDUCE MORALIZTION CORRECTLY?   
  
 PERHAPS THERE ARE SOME CONCEPTS THAT CAN BE CHANGED, BUT SOME CONCEPTS THAT CAN”T? LETS EXPLORE THIS FURTHER.

1st PARAGRAPH IS ‘UNNECESSARY PARTLY’ trim it down and get to the research question ASAP, define moral conviction and move on?

REWRITE THE SECOND TO LAST PARAGRAPH TO MAKE CLEAR HOW IT WOULD BE GREAT FOR SOC.CONSENSUS TO WORK IF WE COULD SUCCESFULLY DEMORALIZE.

“IN PRELIMINARY WORK, WE WERE ABLE TO MANIPULATE SOCIAL CONSENSUS” – make sure to talk about what we already did in the context of what we are planning to do!

TAKE THE LAST PARAGRAPH AND ‘SPREAD IT OUT’ AMONGST THE EARLIER PARAGRAPHS WHEN I BRING THEM UP – DESCRIBE THE EXPERIMENTS IN MORE DETAIL, AND TALK ABOUT WHAT I HAVE DONE ALREADY.

CAN I DEMORALIZE? SERIOUSLY MAKE A PILOT STUDY TO MODIFY MORAL CONVICTION AND SEE WHAT WORKS?  
  
CAN I THEN USE SOC-CONSENSUS TO CHANGE BELIEFS?

MAKE SURE THAT THE TWO OPENING QUESTIONS ARE SPECIFIC AS POSSIBLE AFTER REVISIONS TO MAKE SURE WE”RE REFERENCING EXACTLY WHAT WE”RE DOING.

IF I CAN”T SUCCSESFULLY DEMORALIZE SOMETHING … WHAT IS SOMETHING ELSE I CAN STUDY AND LOOK AT SO I CAN MOVE FORWARD? (INDEPENDENT OF DEMORALIZATION)

Brief Conceptual Overview and Improvement Area

WHAT MAKES ME WANT TO PURSUE IT IF THERE IS MIXED EVIDENCE?

WHY DIDN”T IT WORK…WHAT COULD WE DO DIFFERENTLY TO MAKE IT WORTH CONTINUE TO LOOKING AT?

* Brannon 2019: counterattitudinal object information can influence attitudes about related objects.
  + Lateral Attitude Change: Change in a focal object can lead to changes in related objects (attitude towards ice cream, affects attitude towards cake)
  + Does counterattitudinal information about a focal object change attitudes in related concepts?, as a function of how much the focal object is held with moral conviction
    - “changes in attitudes toward one social group can generalize to other social groups that are perceived as similar in some regard”
    - Generalization, when it’s related and the main obj changes, and Displacement, when change happens but no focal attitude changes.
  + Moral Conviction: known to ‘buffer’ against attitude change. Those that hold high moral conviction towards an attitude are less likely to change their mind (than those w/ low moral conviction).
    - High levels of moral conviction prevent the formation of new evaluative associations?
      * For people w/ low moral conviction, attitude change towards the focal object SHOULD generalize, and for those with high moral conviction, the focal and related objects should be resistant to change
    - Moral conviction could also buffer attitude only for the focal object, but NOT related objects!
      * Individuals received an article that expressed view counter to their reported attitude (opposition 4,5,6 got benefits article, supporters 1,2,3, got an opposition article)
  + Moral conviction was NOT significantly correlated with attitude change towards any of the four objects!
    - Relationship b/w attitude change for the focal object and proximal object was STRONGER when moral conviction was high, e.g., moral conviction does NOT buffer changes in attitudes towards any object, and attitude change for the focal object generalized to the proximal object regardless of moral conviction.
  + WHY? Was moral conviction on the object UNRELATED to changes in attitude on the object? E.g. High moral conviction did NOT make changing minds more difficult?
    - Moral conviction was not manipulated, merely measured, and the two topics chosen were ones where there was fair opinion already existing on both of them?
    - Perhaps the measure was poor? The measure only uses the single item screener, and didn’t actually ask the more advanced 3 item one, or directly address universality/objectivity needs.
      * It is POSSIBLE that the effect of moral conviction on LAC is due to differential effects for SOME determinants of attitude change (e.g., social influence) but not others (e.g., persuasive arguments)
      * This is EXACTLY the type of point we are wanting to make, as we are examining both social influence AND persuasive arguments.
      * The researchers themselves agree that the single item measure of moral conviction could be flawed due to poor psychometric properties.
  + Past research shows that moral conviction can MODERATE change in attitudes, the current research suggests that the impact of moral conviction does not extent to change towards RELATED objects (not my assumption in the first place?)
    - This is VERY SURPRISING, given STRONG CLAIMS about buffering effects in existing theory.
    - Suggests boundary conditions for the buffering effects of moral conviction on attitude change.
    - E.g., due to the ‘particular type’ of counterattitudinal information,
      * Current research used strong arguments in the form of an article to induce attitude change (see Luttrell, 2016).
      * Past research on moral conviction largely focused on attitude change in response to social influence (Skitka, 2009; Skitka, 2005; Aramovich, 2012)
        + What was the PREVIOUS method of ‘demoralizing’, or trying to buffer against attitude change? How is 'our’ method different or superior?
        + E.g., variations on argument ‘strength’, Luttrell used ‘moderately strong’ arguments, Whereas the researchers here explicitly used VERY strong arguments.
    - “Yet, in contrast to the idea that moral conviction produces unwavering attitudes, participants in the current research changed their attitudes in response to counterattitudinal arguments, regardless of their level of moral conviction. This discrepancy suggests that moral conviction may only serve as a buffer against attitude change in cases of persuasion via social influence, while strong counterattitudinal arguments remain quite effective in changing attitudes held with high moral conviction.
* Ryan 2019: People assign value to actions, regardless of consequences.
  + In political judgements, people claim to ‘stand on principle’ even when there’s a real cost.
  + Moral conviction identifies citizens who think about political issues in absolutist terms, and who dismiss damaging information about policy consequences.
    - Thus, we can see what attributes make different POLITICAL arguments compelling to different people.
  + States that human mind has two processes for making judgements, and one of the processes focuses on consequences of a choice (e.g., cost/benefit analysis!)
    - The other process assigns values to actions themselves, with consequences taking a smaller role/no role at all.
    - This mechanism is seen as analogous to deontology (e.g., times when people think and behave as if they were intuitive deontologists)
  + Examples of deontology affecting decision making
    - Refusing to vote for an otherwise appealing candidate that disagrees in an important area (e.g., abortion policy).
  + Posits that moral conviction likely corresponds with a deontological processing style in which weighing costs/benefits seems improper!
    - Does this hold up in political contexts?
    - Predicts that moral conviction identifies who is persuaded by deontological vs consequence focused arguments
    - What attributes makes arguments compelling, do people change opinion more in response to hard evidence about consequences stemming from different alternatives, or to arguments about inherent right and wrong?
  + Cost/Benefit reasoning is difficult, requires causal modeling, and takes additional cognitive resources. Instead, extrapolating effects from the ‘value’ of the action themselves is much easier (and deontological!)
    - Many respondents claim there is no amount of money they would take to perform certain acts (slap your dad, cook and eat your dog, Graham, Haidt, and Nosek 2009, 1045)
    - Thus, strict rationality or logic isn’t necessarily the cause behind these choices.
    - Deontology is characterized as a ‘psychological mode’ in which judgements stem from the appropriateness of an action, rather than consequences, which is cognitively easier to process.
  + It might have been that this variance simply reflected a general form of attitude intensity (cf. Petty and Krosnick 1995), such as caring about the topic, but dozens of independent studies have shown that this metacognition— termed moral conviction—is not reducible to other facets of attitude intensity (Skitka 2010; Skitka, Washburn, and Carsel 2015, for reviews).
    - Measuring moral conviction is a ‘bottom up’ approach to characterizing what is considered, psychologically, the ‘moral domain’.
    - Asked whether some attitude connects to right/wrong, and response are taken at face value!
  + General proposition – Political attitudes held with moral conviction are associated with a deontological processing style
    - Eschewing the practice of weighing costs against benefits
      * Unique features: Rejecting cost/benefit analysis is unique to find (e.g., not related to objectivity/universality, or conformity pressure resistance)
      * Focuses on political argumentation – the frameworks people use to present their own views, and respond to arguments from others.
  + Note: Moral conviction exhibits high over-time stability! On par with other facets of attitude intensity.
    - “Scholars and laypeople alike routinely attribute deontological behavior (e.g., rejecting reasonable compromises) to a vague and generic psychological concept: extremism (e.g., Gutmann and Thompson 2012). Isolating the particular facets of extremism that promote obstructionism is an important step forward.
* Study 1: How do people think about their political opinions? Is moral conviction associated with a deontological mind-set?
  + Specifically – do arguments couched in deontological language have more appeal than one that focuses on costs/benefits?
  + “Citizens with morally convicted attitudes concerning a policy will REJECT arguments that imply a need to weigh costs/benefits on that policy”
  + Moral conviction is directly tested against attitude extremity, attitude importance, and attitude relevance!
    - Responses were recorded on a seven-point scale ranging from “strongly oppose” to “strongly support decreasing Social Security benefits.” Once folded at the scale midpoint, these responses become a standard measure of attitude extremity.
    - “The deontological clipping emphasized “first principles” and “core moral responsibilities,” the consequence-focused argument emphasized “costs and benefits” and a “need to carefully weigh the pros and cons.” (The premise that consequences might countervail each other is antithetical to deontology.) – There was an additional manipulation check to validate this!”
* Study 2: Argument choice, what are the arguments that they choose to make themselves?
  + Specifically – Do citizens with morally convicted attitudes choose deontological arguments over consequence – orientated arguments, when it comes to explaining and justifying their OWN opinion?
  + For each issue, after measuring aspects of attitude intensity, subjects were asked to evaluate (5 pt likert scale) four arguments on their own side of the issue, two of the arguments were deontological, and two were focused on consequences.
    - Deontological argument preference was calculated by summing preference for the two deontological arguments, and subtracting summed preference for practical arguments
  + Moral conviction is associated with preference for deontological arguments!
    - Is this actually due to an effect of moral conviction on deontology?
    - None of the other attitude extremity measures were associated with utilitarian/deontological arguments.
* Study 3: Responses to information about consequences
  + Specifically – Do citizens with morally convicted attitudes resistant to new information that their preferred outcome will have negative consequences?
  + “Opinion change in response to the hypothetical revelations, which is defined as movement (from the first administration of the extremity question to the second administration) in the direction of the nudge. Thus, subjects on the liberal side of an issue receive positive scores for change when their opinion become more conservative, and subjects on the conservative side receive positive scores when their opinions become more liberal”
  + Moral conviction does indeed identify style of thinking that is insensitive to information about policy consequences.
    - On the basis of model 4 in table 3, and holding other measures at their means, the individual with the nonmoralized opinion would be expected to moderate her opinion by 0.35 points—23% of the range of the dependent measure. The individual with the moralized attitude would moderate by 0.18 points—half as much.
* Study 4: Responses to persuasion efforts
  + Are morally convicted individuals motivated to reject arguments suggesting alternatives/antithetical rules?
  + OR, when contrary moral mandates are pitted against each other, do individuals waver on their moral commitments? E.g., this is the ‘matching’ hypothesis.
  + Citizens with nonmoralized attitudes are persuaded by arguments focused on consequences, and those with moralized attitudes reject the same.
    - Subjects whose issue attitudes are morally convicted are LESS persuaded by the consequence argument than those with NON morally convicted attitudes! Moral conviction = resistant to consequence arguments.
* Citizens respond differently to consequence-oriented persuasion, as a function of the processing style they bring to a particular issue.
* Bastian 2015: Can money influence the effect of moral conviction on decision-making?
  + Moral conviction behind mass mining, high moral conviction against mining = reduced acceptance of mining.
  + However… economic rewards from mining = increased acceptance of mining!
    - ALSO an interaction, when perceived economic benefits are high, the influence of moral conviction on reduced acceptance is weaker!
  + Moral convictions around the ethical use of resources, wherein generally these moral convictions, reflecting deontological approaches, can be opposed to economic gain (e.g., utilitarian concerns?)
    - Are those with strong utilitarian leanings more susceptible to argumentation based on pragmatic/economic outcomes? Does this lead to effective attitude demoralization?
  + Economic rewards can provide a ‘boundary condition’ wherein it outlines clear limits to the effects of moral convictions.
    - Interesting, as moral convictions can be pursued at the expense of personal gain, e.g., those that dislike Walmart, paying more for consumer goods (not in self interest) due to their conviction (Cronin et al., 2012)
  + Economic benefit was measured by asking how avg. citizen life has improved based on mining, and then how their own life personally has been improved by mining.
    - Note: Support was framed as strength of OPPOSITION against X or Y, asked by saying q’s like ‘X bothers me a lot’, ‘X threatens values that are important to me’ and ‘ my attitudes on X is a matter of principle’.
    - Age was associated with moral conviction and acceptance of mining, older people had LOWER moral conviction against mining, and were more likely to accept mining.
    - Males were also more likely to accept mining than females.
  + Significant interaction b/w effects of country and region on moral conviction!
    - In mining regions, participants in Australia and China had significantly greater level of moral conviction AGAINST mining than those from Chile. For non-mining regions, participants from China reported the highest level of moral conviction, followed by Australia and Chile.
    - Chileans saw great reported benefit from mining, followed by China and Australia. Those who lived in mining regions had greater benefit from mining than non-mining regions, except in Australia.
  + Moral conviction had a direct effect on acceptance of mining, higher levels of moral conviction based opposition were associated with lower levels of mining acceptance.
    - Strong interaction effect from moral conviction and perceived benefit though. For those who saw greater benefit to mining, moral conviction was negatively associated with acceptance to a statistically significant LESSER degree!
  + “For those who perceived stronger benefit from mining, they would be more likely to accept mining compared to those who perceived less benefit from mining even when they held the same level of moral convictions against mining. In other words, perceived higher level of benefit enhanced people’s acceptance of mining irrespective of the level of moral convictions they held against mining. Second, when perceived benefit from mining was high, the influence of moral conviction on mining acceptance was weaker.”
  + Financial incentives are strong motivators of attitudes/decision making!
    - Although people are motivated to act in accordance with moral convictions, economic rewards can motivate them to consider their own/others resource needs, thereby reducing the influence of moral convictions in resource decision making!
    - Huge inherent tension between moral convictions and personal gain, in that they often both butt heads against other. Salient financial incentives can result in reduced effect of moral conviction.
* Siegrist 2011: Procedural fairness was a positive predictor of acceptance.
  + Impact of fairness on acceptance of the issue is larger for people who have moral conviction.
    - E.g., In situations where important issues are decided, fair procedures influence decision acceptance.
  + For persons who have low moral conviction, outcome fairness had significantly stronger effect on acceptance compared to those with high moral conviction.
    - E.g., The outcome fairness is less important for those with high moral conviction, as it may not matter whether the trials are done there or somewhere else!
* Rhee 2019: Review of contemporary moralization and demoralization research
  + Two-factor structure for understanding moralization.
    - Whether it examines judgements of actions/attitudes/entities, or…
    - Whether it captures ‘moral recognition’ (the shift from neutral to moral) or ‘moral’ amplification.
* Once an act has been labeled as ‘immoral’ this has social implications.
  + There is ‘fragmentation’ in how moralization is defined, conceptualized, and measured.
* The conceptual distinction between moral recognition and moral amplification is relevant!
  + Moral judgements of specific actions. Presents people with hypothetical action, and then judge the action by the degree of moral ‘wrongness’.
  + However… provides little information about what exactly has been ‘moralized’, thus, cannot determine how this change might influence future judgements/behavior.
  + Moral attitudes – ask individuals to ascribe moral significance to attitudes on issues or behaviors. This focuses on application of morality in a more ‘abstract’ way.
    - “For example, while a judgment measure may ask participants to indicate how morally wrong they perceive a person smoking to be, an attitude measure would ask how morally wrong they consider smoking as a general behavior (Rozin & Singh, 1999)”
    - Highly advantageous when identifying factors for highly polarized issues.
* According to this distinction, something would be considered moralization if a morally neutral act enters the moral sphere, while a shift from seeing a slightly wrong act as more wrong would be considered moral amplification (Avramova & Inbar, 2013; Landy & Goodwin, 2015; Pizarro, Inbar, & Helion, 2011).
  + One significant issue is that if we ask about differences in moral conviction, we can be very clear about distinguishing nonmoral to moral, vs moral to more moral
  + Perhaps directly ask if an issue is moral, and if yes, how moral is it as a second item?
* Moral Recognition: “the psychological process of attaching moral significance to a given action, attitude, or entity”
  + “Studies have revealed that situational and cognitive factors such as the salience of monetary interests (Gino & Mogilner, 2014) and previous engagement in the same behavior (Shu & Gino, 2012), can lead to moral detachment, whereby people no longer see the moral significance of a given action. This work indicates that moral recognition may be influenced by contextual factors as well as individual motivations and that the attachment and detachment of moral significance may fluctuate over time and across situations within individuals”
    - This clearly indicates some form of ‘demoralization’ is indeed possible, or to be more specific, if demoralization is not just reduction of moral intensity, but also perception that an issue is no-longer moral?
    - Also includes the effects of “ethical fading” which is the process of ‘self-deception’ to believe that one’s ethical principles were NOT violated.
  + Moral recognition of a story changed when ‘disgust-inducing words’ were present, and seen as more morally wrong! (as compared to not at all morally wrong).
  + Feinberg study of increasing moral conviction against meat-eating
    - Predictors: moral emotions and moral piggybacking. Controlling for already existing level of moralization (e.g., degree to which moral emotions [disgust] at the thought of eating meat). As well as moral piggybacking (the extent to which killing animals for meat was associated with other moral principles they live by)
    - E.g., moralization can be increased by associating a nonmoral action with other, moral principles, that people claim to live by.
* Moral Amplification: “Changes in extremity of felt ethical perception”
  + Incidental affect (particularly disgust) can lead to moral amplification of ‘wrongness’ or ‘badness’ judgements (Johnson et al., 2016; Pizarro et al., 2011; Schnall et al., 2008)
    - However… the effects are small, and strongest when inducing bad smells or bad tastes.
  + Beliefs regarding harms or benefits for candidates were NOT a significant predictor of moral amplification change for 2012 US presidential election.
    - Instead, predicted by enthusiasm (for liked candidates), and hostility (anger or disgust) for disliked candidates.
  + Receiving messages framed using ‘moral language’ can result in moral amplification.
    - Persuasive messages centering around disgust and harm can increase moral conviction (compared to a no message control group). These differences persist at 2 week follow-up. The harm condition was especially effective at leading to higher levels of support for related topics/policies (Clifford, 2018)
    - Behaviors that have descriptions framing it as disgusting or anger inducing (“acting like this is really gross/really irritating), instead of just seeing the behaviors without the descriptions, resulted in greater perception of the behaviors as ‘wrong’. (Rottman et al., 2017)
    - “Receiving communication from others which makes salient, the moral features of a given attitude or action may be an important avenue for moral amplification”
  + Descriptive/Social norms – rules or standards for behavior (descriptive or injunctive)

THE INTERVENTION WASN”T SUCCESSFUL, BECAUSE IT DIDN”T ACTUALLY REDUCE MORALIZTION CORRECTLY?