Emotional Belief Analysis Rules-In-Form Coding Guidelines

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Abstract
Emotions are a pivotal component of political discourse and are an essential aspect of policy process research. The Advocacy Coalition Framework analyzes emotional expressions (emotions expressed via language) through their conjunction with beliefs. Expressed emotions and beliefs are the foundation of Emotional Belief Analysis (EBA), a coding and data analysis method that allows researchers to reliably identify, classify, and interpret emotional belief expressions in political discourse. This document outlines the methods used to analyze various documents, including news media, legislative testimony, *amicus* briefs, legislative testimony, social media, interviews, and more. This method is inspired by and built upon past applications of coding beliefs within the ACF, primarily Hank Jenkins-Smith's application of coding legislative beliefs (Jenkins-Smith et al., 1991; Sabatier and Jenkins-Smith, 1993; Zafonte and Sabatier, 2004).

Keywords
Emotions, Advocacy Coalition Framework, Coalitions, Emotions, Beliefs, Network Analysis

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Introduction

Emotions are a critical component of what it means to be human. All dimensions of the human experience are emotion-laden, and thus, emotions color behaviors, values, and beliefs. While the influence of emotions extends to political behavior, the formation of political beliefs, and how individuals and groups influence policy, emotions have remained mainly in the background of policy process research theoretically and methodologically. While policy process theories acknowledge that actors are boundedly rational, past applications have neglected to acknowledge that behavior and beliefs are linked with emotions.

This trajectory is changing and policy studies increasingly incorporate emotions into their studies to better understand human behavior, decision-making, learning, and coordination. The study of emotions unlocks a range of questions, from why people engage in policy, to how people make sense of their world, to how power or legitimacy manifests through emotions. Emotions have long been referred to explicitly or implicitly in the foundation of policy process theories, though rarely as a theoretical focus. This codebook which examines the roles of discrete and difuse emotions in the Advocacy Coalition Framework.

The Advocacy Coalition Framework (ACF) is one of the most established and applied theoretical frameworks (Jenkins-Smith et al., 2018). The ACF is widely used to study coalitions, and the methods outlined in this documentation build upon decades of research.These studies (and more) have given us valuable information on how different actors and organizations organize around shared beliefs, but missing from these understandings are how actors feel about their beliefs, their allies, and their opponents. There are more questions to answer about coalitions, and the methods presented in this documentation offer us new ways to find different apertures of details in our coalition studies. Whether we take a wide picture and identify coalitions through their position statements and beliefs or zoom in to include their emotions and beliefs, these details offer exciting new pathways of discovery. This codebook accompanies several papers and ongoing efforts from the Center for Policy and Democracy lab and presents a method of studying emotions within the Advocacy Coalition Framework.

Importantly, we distinguish between affect and emotions, with affect defined as *biologically/physiological feelings that are often ambivalent and amorphous* (Mercer, 2010); these are akin to thoughts, and are not easily observable. We contrast that with emotions, which we define as *emotional expressions of that affect through language* (Durnová, 2019), which we can observe through textual analysis. Our approach takes an “outside in” approach (Brader & Marcus, 2013) to measurement and does not aim to capture how people actually feel but rather measure the emotions that they express out loud (Rogers & Robinson, 2014)..

How to use these coding guidelines

These guidelines are written for researchers with a background in the ACF and network analysis methods. Researchers less familiar with ACF concepts and methods should read Nohrstedt et al., 2023 and Weible & Workman 2023 prior to applying these guidelines.

Intended Application

These methods have been developed for the analysis of emotion and belief expressions in written discourse or transcriptions of verbal discourse. This includes but is not limited to, legislative testimony, news media, social media, interviews, and amicus briefs. They were not developed to measure experienced emotion, or the emotion that is felt, but

rather the expressed emotion, which is observable through language. This method applies to identifying both explicit and implicit emotional expressions.

Discrete vs Diffuse

Our method allows for the analysis of discrete emotions (e.g. affinity, fear, compassion) as well as diffuse (positive vs negative). Both methods have their merits, and again these give researchers the tools to select the right aperture of detail in their coalition studies.

Intercoder Reliability

Determining intercoder reliability is done in several ways. First, the results of the initial coding are shared and discussed for consensus. This process is repeated several times until all coders coded the articles the same a minimum of 80 per cent of the time. One coder then completes the remaining coding of articles and another author checks 20 per cent of this coding. When an explicit emotion word is added to the thesaurus, the team should discuss the addition to make sure there is agreement on appropriate categorisation informed by the word's definition and contextual meaning in the data.

Guideline for Identifying Coalitions via Textual Analysis

These guidelines are prepared to help in identifying, describing, and explaining coalitions via textual analysis.

Coalitions are generally studied either in a policy subsystem or within a policy situation and can be identified through several different data sources. This coding method is applicable for identifying coalitions via emotion-belief dyads and traditional ACF position-belief dyads.

Concept	Description
Policy subsystem	A policy subsystem is the geographical and topical subset of a government system (e.g., US energy policy) or a subset of another subsystem (e.g., US nuclear energy policy as a subset of US energy policy). The traditional conceptualization of an advocacy coalition in ACF is at the subsystem level; hence, this is ACF's traditional unit of analysis.
Policy situation	A policy situation is a collective action setting relevant to a policy subsystem. It is more temporally bound and is often set within a formal or informal decision/policy-making venue (e.g., legislature, regulatory process, court proceeding, task force, etc.). It can also be an open debate in the public space around a policy decision when there is no clear venue (e.g., ballot initiative), or in response to an event (e.g., the MeatOut case). When analyzed in a policy situation, the coalitions are usually a subset of the policy subsystem coalition (meaning not all coalition members will speak up or participate in the policy subsystem). Coalitions in a policy situation will also consist of additional actors pertinent to the policy situation (e.g., legislators in a legislative debate or the general public in a controversial issue speaking up in the newspaper).
Data Source	The data source is the information used to examine a policy subsystem or situation. It can be directly or indirectly related to the policy subsystem or situation. For example, a legislative debate over a gender affirming care bill can be analyzed via e legislative testimony (a direct source) from the legislature or from media sources about the testimony (an indirect

	source). Sometimes there is no direct source. E.g., an analysis of Colorado Governor's MeatOut Proclamation is a policy situation that aroused backlash and conflict that lasted a few weeks in an agriculture/livestock/ranching policy subsystem that does not involve a closed decision-making venue but public discourse. It could be analyzed and observed through indirect sources of twitter, news media, or other.
Position-belief dyad	Position-belief dyads are a unit of observation identifying coalitions via expressions in texts. This type of dyad is consistent with traditional ACF methods of belief identification. t consists of a belief (from ACF's belief system model, Sabatier and Jenkins-Smith, 1999, pg. 133) and a position (agree/disagree, favor/disfavor). This is a subset of emotion-belief dyads. For example, (e.g., favor/agree with a bill, disfavor/disagree with a population). These are commonly seen as pro and anti in conjunction with a belief. See Sabatier and Jenkins-Smith, 1993, methodological appendix.
Discrete-emotion-belief dyad	A discrete-emotion-belief dyad is a unit of observation signifying a way of identifying coalitions via expressions in texts. It consists of a belief and an emotion (e.g., anger, compassion, fear, etc.). For example, fear of a bill and compassion for a population are two emotion-belief dyads.
Diffuse-emotion-belief dyad	A diffuse-emotion-belief dyad is a unit of observation that identifies coalitions via expressions in texts. It consists of a belief and a diffuse emotion, that is if the emotion is positive (affinity, compassion, confidence, content) or negative (anger, carelessness, dismay, fear, suffering).

Notes/Tips:

- Most text will be analyzed around a policy situation, not a policy subsystem. The exception might be a long-term analysis of news media, twitter, or other social media that is about a policy subsystem in general and not focused on a particular policy situation. Policy subsystems are best observed and studied through surveys and interviews.
- These guidelines are applicable to a policy situation and subsystem.
- When focused on a policy situation there is always an output, a result. This can be one or more of the following: policy change (adoption of a policy), no policy change (failure to adopt a policy), an expression of power (a coalition exerted their muscles), an implementation of a policy (a decision to deliver of a public service or a decision to enforce of a policy), new information (e.g., a report), a court decision, an agenda item, unknown/unresolved output, etc.
- Some policy situations can be short (a few days to weeks) or long (years).
- When analyzing text about a policy situation, the following questions should be asked and explored:
    1. <u>How does the policy situation fit into the broader policy subsystem?</u> More specifically, does the policy situation deal with a secondary, policy core, or deep core issue related to the policy subsystem?
    2. <u>How did the policy situation emerge?</u> Policy situations are like a game that is decided to be played. Examine how/why the policy situation arose. Who decided that the game will be played? Who decided the rules? Etc.
    3. <u>What are the rules/norms context of the situation?</u> Is it a closed venue (e.g., some task forces), an open venue (e.g., a public hearing)? Note also the difference between the data source and the situation); e.g., a public hearing can be analyzed via the actual text of what was spoken or news media of the hearing.
    4. <u>What is the output of the policy situation?</u> If not resolved, say it is unknown or unresolved.
- *All coalition text needs to be interpreted within a context. Know the context*

Appendix A. EBA Codebook

Statements are coded using 12 coding units (see Table 1).
A statement conveys an entire thought and has one identified belief and emotion. It may be a part of a sentence, one sentence,or several sentences.

Table 1. Coding Units

Coding Unit #	Coded Name (abbreviation)	Definitions and Descriptions
1	**n_actor (n_actor)**	The narrating actor is the individual speaking. Use the full name (first and last), if known. Use the individual's full name (if known) in the first statement attributable to the narrating actor using "first, last" format. In subsequent statements, utilize DNA's drop-down list function for the same actor to ensure consistency. If a journalist is paraphrasing for another person, the person being paraphrased is the narrating actor. Look for words such as "said, cited, expressed" to find paraphrased phrases.
2	**n_actor affiliation (n_actor_aff)**	Affiliation is the informal or formal organization or group connected to the narrating actor. Be as specific as possible and include the full name of the organization. If the coded statement is from a journalist, include the name of their outlet as the affiliation. If a narrating actor is not clearly speaking on behalf of the organization they belong to or if their profession rather than their organization identifies them, code their title or profession instead (e.g., "emergency physician"). If a narrating actor is a member of the public or has no affiliation mentioned, list "public" as their affiliation.
3	**n-actor position (n_actor_pos)**	The narrating actor's position (supportive (pro) against (anti) neutral (neutral)) concerning the central focal point of interest, such as a policy, project, process, or situation. The focal point of interest will vary by the research project. Use the compilation of statements for the narrating actor from the document(s) to inform this code. If against the focal point, code as anti. If for the focal point, code as pro. If both against and for or if unclear or undisclosed, code as unidentified.

4	**EB_actor (eb_actor)**	The individual, entity, or organization that feels/is absribed the emotion as expressed. When coding statements, use the individual's full name (if known) in the first statement attributable to the actor using the "first, last" format. In subsequent statements, utilize DNA's drop-down list function for the same actor to ensure consistency. If a statement involves a group,code the statement once for each group member if every member is named. If a group is cited, but every member is not named, code the statement once and list the group as the actor (e.g., protesters, State Assembly members, etc.)
5	**EB_actor_affiliation (eb_actor_aff)**	Similar to the narrating actor's affiliation, the emotion-belief actor's affiliation is the informal or formal organization or group connected to the narrating actor. Be as specific as possible with the name code. Use the full organization name (if known) in the first instance that the organization is coded. In subsequent statements, use DNA's dropdown list function to ensure consistency. If an emotion-belief actor is not clearly speaking on behalf of the organization they belong to or if their profession rather than their organization identifies them, code their title or profession instead (e.g., "emergency physician"). If an emotion-belief actor is a member of the public or has no affiliation mentioned, list "public" as their affiliation.
6	**EB_actor position (eb_actor_pos)**	The emotion-belief actor's position (supportive (pro) against (anti) neutral (neutral) concerning the central focal point of interest, in this case, gender affirming care. The focal point of interest will vary by the research project. Use the compilation of statements for the narrating actor from the documents(s) to inform this code. If against the focal point, code as anti. If for the focal point, code as pro. If both against and for or if unclear or undisclosed, code as unidentified.
7	**self narrator (self_nar)**	Self_narrator refers to whether the narrating actor is describing their emotion. If so, code as yes. If they are narrating for others, code no.

8	**emotion (emot)**	Emotion refers to the expressed emotion. When coding emotions, code both explicit and implicit emotions (see coding unit #9). Explicit emotions are directly mentioned in the statement (e.g., "He was *concerned* about the policy.") Concerned is the explicit emotion. For explicit emotions, write the emotion word, and then in parentheses, write one of the 8 categories that this emotion fits. The 8 categories include affinity, dismay, anger, content, fear, confidence, careless, and compassion. The thesaurus with listed examples for the 8 categories is a separate document available for use from the authors' github. Review the thesaurus before coding, and use the search feature for the explicit emotion word, (e.g. concern), within it while coding. Many emotion words have previously been identified. The word in parentheses needs to be one of the 8 parent categories from the thesaurus, e.g., "demand (anger), concern (fear), hurt (dismay), need (affinity)." If there is no word or phrase that directly implies an emotion, but the statement as a whole conveys emotion, then code the implicit emotion (one of the 8 parent categories) in parentheses without any emotive words/phrases outside of the parentheses. Implicit emotions are not directly mentioned, but the statement can still convey a feeling. For example, "Who knows why they are proposing this policy?" would be an implicit emotion where "who knows" is coded as the emotion of uncertainty in the category of fear. If there are multiple emotion categories, code each one as a separate line of code. If the same emotion is used more than once and attached to different beliefs (see coding unit #11, code it multiple times (in separate lines).
9	**explicit or Implicit (exp)**	For emotional expressions with an explicit expressed emotion (see Coding Unit #8), code as explicit; otherwise, code as implicit. Explicit emotions are included in the thesaurus. If it is not in the thesaurus, it is most likely an implicit emotion. Additionally, adverbs are often implicit and are accompanied by negative modifiers, often signifying implicit disapproval or suffering emotion.

10	**emotional tense: (emot_tense)**	Emotional tense refers to the expressed timing of the emotion: past, current, future, or ongoing. Code only one category. Code text as written (e.g., do not interpret the present tense as ongoing because of outside information). ● **Past**: The subject of the emotion has already happened ● **Future**: The subject of the emotion is in the future. There is an explicit mention that the actor thinks something will or might happen ("residents are concerned about a proposal."). ● **Current**: The subject of the emotion is immediate but not with an enduring or lasting characteristic. ● **Ongoing**: The subject of the emotion is something in the present with an enduring or lasting characteristic.
11	**belief (blf)**	Belief is coded as one of the ACF's belief system components and levels. It is the "object" of the emotional expression. The belief could be a deep core belief, policy core belief, or secondary belief. We build from the 1999 Jenkins-Smith conceptualization of belief systems. See a full explanation here. 1. **Deep Core Beliefs** - Fundamental normative axioms, the priority of values, distributive justice (whose welfare counts), sociocultural identity, race/gender/ethnicity/religion. Examples from a gender affirming care studyinclude gender diversity, gender dysphoria, inclusivity, and discrimination; code as dcb_discrimination, etc. ASK: is this a blanket value across policies? 2. **Policy Core Beliefs** - We loosely look for beliefs in three categories "policy core policy preference," "overall seriousness of the problem," and "basic causes of the problem." Thehe study about gender affirming care identified categories: gender affirming care, lack of gender affirming care, health and safety of kids, health and safety of trans kids, disinformation, and the bill. ASK: What is this policy about? 2. **Secondary Belief** – the belief is about the implementation, the formal and informal policy process. For example, in many cases involving legislative testimony as the data source, questions about *how* a policy will be implemented are often categorized as secondary beliefs.Code the statement sb_implementation. ASK: How will this be implemented?

12	**context (ctx)**	Enter other relevant information about the context of this statement if it is not clear from the statement itself, particularly as it relates to the emotion being expressed (e.g. what/who caused the emotion, what/who is the target of the emotion). Include hat tipping (if the narrator acknowledges the emotions of one or more actors with a conflicting point of view while also stating their own point of view), or devil's shift, or inanimate for objects.

After coding, there are a few key terms that will often be used when describing the data.

Narrating actor	This refers to the actor expressing a dyad.
Emotion Belief actor	This refers to the actor ascribed the dyad. The ascribed actor could be the narrating actor (i.e., the narrating actor says, "I favor the bill"), or the narrating actor can be different from the ascribed actor (the narrating actor says "They favor the bill").
Self-expressed dyad	This is a dyad where the narrating and the ascribed actor are the same person.
Other-expressed dyad	This is a dyad where the narrating and the ascribed actor are different.

Notes/Tips:

- These networks are gathered by identifying the narrating actor and the ascribed actor. Sometimes, the narrating actor and the emotion-belief actor are the same person. Other times, they are different.
- Emotion-belief dyads vs. position-belief dyads will produce different coalitional patterns as described below. (e.g., position-belief dyads will produce denser coalitions).

Appendix B. Explicit vs Implicit emotion coding

EBA can be applied to identify both explicit and implicit emotions. Explicit emotions utilize emotional language that can be identified as synonyms to the emotional categories identified for the study. Implicit are emotional expressions used through more descriptive language, or with language that is more coded. See the following three tables for examples.

Table 2. Examples of Explicit and Implicit Emotions Coding

2a. Explicit coding from gender affirming care context:

Concept	Secondary Concept (diffuse category)	Indicator (parent category)	Measure (example emotion words)	Example
Explicit Emotional Expressions	**Positive Emotion**	**Affinity**	Love	You are loved
		Compassion	Protect	This is about protecting minors
		Confidence	Care	These children need care
		Content	Satisfaction	(no examples in discourse)
	Negative Emotion	**Anger**	Hate	This bill causes hate
		Carelessness	Discount	This bill discounts the needs of trans youth
		Dismay	Harm	This bill causes harm
		Fear	Risk(s)	There are known risks to GAC
		Suffering	Detremental	This bill is detrimental to the health of our kids

2b. Implicit emotional expressions are coded with the same logic, only instead of the explicit word, a phrase is analyzed for its meaning.

Concept	Secondary Concept (diffuse category)	Indicator (parent category)	Measure & Example (example emotional language)

Implicit Emotional Expressions	**Positive Emotion**	**Affinity**	We are for social justice
		Compassion	I do feel for these kids
		Confidence	This is a very tightly crafted bill
	Negative Emotion	**Anger**	The state will have blood on its hands
		Carelessness	Please listen to us
		Dismay	I don't know what happened to him
		Fear	We need to stop gender affirming care before it starts.
		Suffering	Its not an easy thing to deal with

2c. Examples from Agriculture debate

Secondary Concept (Diffuse Category)	**Indicator (Parent Category)**	**Measure (Emotion Word)**	**Example**
Explicit Expressions			
positive	affinity	support, promote	"Numerous food and agriculture interests have rallied together to offer support and promote Gov. Pete Ricketts' proclamation of March 20 as 'Meat on the Menu Day' in Nebraska."
positive	compassion	deserves, respected	"As the second leading economic driver in Colorado it deserves to be respected as such."
positive	confidence	trust	"Poll after poll affirms that the public trusts farmers and ranchers to do the right thing, that they are good at what they do, and that the public finds them credible on the issues."
positive	content	ecstatic	"We're ecstatic to give back to Denver, in a huge way!"
negative	anger	combat	"In order to combat misinformation and combat the 'MeatOut' movement, the Colorado Cattlemen's Association."

negative	carelessness	ignores	“This ballot initiative ignores science and years of animal husbandry practices designed to give the best quality of life for our animals and produce the highest quality nutritional products.”
negative	dismay	rejecting	“Commissioners are taking action by rejecting the governor's proclamation.”
negative	fear	concern	“The Commissioners express their concern that the Governor of Colorado would call for a boycott.”
Implicit Expressions			
positive	affinity	“You, your families, and your hard work are part of the backbone of Colorado's rural communities.”	
positive	compassion	“Your voice matters.”	
positive	confidence	“Rest assured, serving as the Minority Whip, I will fight hard against the over-reaching agenda of the majority party alongside the other Republican legislators.	
positive	content	“It’s a free country.”	
negative	anger	“This makes my blood boil.”	
negative	carelessness	“This action is tone-deaf.”	
negative	dismay	“This is a blow to Colorado agriculture.”	
negative	fear	“I have been listening when you tell me what keeps you up at night: Questions of whether your kids will be able to make a living in agriculture, how you will manage through another year of drought, and what the changing economy will mean for your family and community.”	

Appendix C. Using the thesaurus

Explicit EBA coding relies on a thesaurus which consists of various emotional word categories. Identifying the categories of words for the thesaurus requires some induction, as different contexts of and policy realms use different, and often context-specific language, though there is considerable similarity across venues, data sources, and policy realms. The thesaurus has 356 emotion words within the eight emotions categories for comparison. For instance, when in the news media statement “We are concerned about the pipeline in our town,” you would search the thesaurus for “concern” and find it within the fear category. The statement for both “concern” and fear, and mark the emotion as explicit. For implicit statements, code based on the categorical emotion. For instance, ”My wife and I are running out of patience,” is coded as “frustration” as found under the suffering category. This statement is coded as suffering and implicit. By utilizing the thesaurus, coders could reliably identify the same emotions in the statements.

Appendix D. Coding Belief Systems

Belief Systems

To conceptualize, simplify, and direct goals, policy actors coalesce around common beliefs conceptualized as a three-tiered belief structure consisting of deep core beliefs, policy core beliefs, and secondary beliefs. Deep core beliefs are normative values and ontologies that define how a particular policy actor conceives notions of right and wrong, justice, freedom, etc. These deep core beliefs are not policy-specific but span multiple subsystems and policy topics. Policy core beliefs, on the other hand, are directly applicable to their position in a particular subsystem and help to determine whose welfare is of greatest concern, how serious the problem is, the roots of the problem at hand, and the potential impacts of a policy (Sabatier and Jenkins-Smith, 1999). Secondary beliefs encompass the more technical aspects of belief systems, including how to achieve a policy goal and regarding what policy instruments should be used. These tiers of beliefs interact to form values, direct behavior, and influence the subsystem[1].

Within Emotional Belief Analysis, belief is coded as one of the three belief system components. It is the "object" of the emotional expression. The belief could be deep core belief, policy core belief, or secondary belief.

1. **Deep Core Beliefs** - Fundamental normative axioms, the priority of values, distributive justice (whose welfare counts), sociocultural identity, race/gender/ethnicity/religion. Examples in the gender affirming care case include gender diversity, gender dysphoria, inclusivity, and discrimination. Code as dcb_discrimination, etc. ASK: is this a blanket value across policies?

2. **Policy Core Beliefs** - We loosely look for beliefs in three categories "policy core policy preference," "overall seriousness of the problem," and "basic causes of the problem." The study about gender affirming care identified categories: gender affirming care, lack of gender affirming care, health and safety of kids, health and safety of trans kids, disinformation, and the bill. ASK: What is this policy about?

2. **Secondary Belief** – the belief is about the implementation, the formal and informal policy process. For example, in many cases involving legislative testimony as the data source, questions about *how* a policy will be implemented are often categorized as secondary beliefs.. Code the statement sb_implementation ASK: How will this be implemented?

Gender Affirming Care Belief Codes

dcb_gen_dys	Deep Core Belief of Gender Dysphoria, the feeling of discomfort or distress that might occur in people whose gender identity differs from their sex assigned at birth or sex-related physical characteristics.
dcb_discrimination	Deep Core Belief of Discrimination, the unjust or prejudicial treatment of different groups, classes, or other categories of which people belong. Often in this context the discrimination is based around gender identities.
dcb_inclusivity	Deep Core Belief of inclusivity, the

dcb_gend_id	Deep Core Belief of Gender Identity, the belief in different gender identities and transgender individuals
pcb_gac	Policy Core Belief of Gender Affirming Care, the topic of the bill, and medical treatment to align aspects of ones life to their gender identity
pcb_no_gac	Policy Core Belief of no Gender Affirming Care, describes situations where there is not access to or access is blocked to gender affirming care
pcb_bill	Policy Core Belief of the bill, the piece of legislation from the debate
pcb_health_safety_trans	Policy Core Belief of the Health and Safety of Transgender kids
pcb_health_safety_kids	Policy Core Belief of the Health and Safety of all kids (used primarily to ascribe cisgender, or non transgender or gender diverse kids).
pcb_disinfo	Policy Core Belief of Disinformation, false information which is intended to mislead
sb_legislative	Secondary Belief Legislative, the belief is about the legislative process itself
sb_implementation	Secondary Belief Implementation, the belief is about how the bill would be implemented

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[1] From Gabehart and Weible, Encyclopedia of Public Policy, Advocacy Coalition Framework: https://link.springer.com/referenceworkentry/10.1007/978-3-030-90434-0_5-2

Appendix E. R syntax for creating dyads

Import data:

```
{r import data}

ark3=read_csv("~/r_files/MOPP/23-10-08-ark3.csv")
```

Paste columns of coded emotions with coded beliefs

```
{r make dyads}

ark3$emotedyads_2 <- paste(ark3$emot2,"&",ark3$blf)

ark3=ark3[,c(1,2,3,4,5,6,7,8,9,11,10)]

ark3$emotedyads_2=gsub(" ","", ark3$emotedyads_2)

write_csv(ark3, "~/r_files/MOPP/23-10-08-ark4.csv")
```

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