

The Role of Social Motives in Dream Content

Frederick Thomas^{*1}, Katelynn Andrews² and Christien Leavitt²

¹Professor of Psychology, College of Humanities and Sciences, Psychology Department, Coker University, USA

²Psychology Major Coker University, USA

ABSTRACT

The fundamental social motives framework has generated several empirical findings demonstrating the activation of a motivational system that guides conscious (live) cognition and downstream behavior in functional ways. This evolutionary view of motivation describes social cognition as an inner motivational state designed to recognize, analyze, and mobilize behaviour to manage social threats or opportunities during conscious social situations. This paper revisits the role of fundamental social motives during unconscious (remote) cognition. This paper argues that the premise of fundamental motives is worth preserving during dreaming. The connections between social motives and dream content are highlighted. This paper proposes a novice perspective that serves as a generative foundation for future empirical research.

*Corresponding author

Frederick Thomas Assistant Professor of Psychology, College of Humanities and Sciences, Psychology Department, Coker University, USA.

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Introduction

E-motivational system is a general term to describe social cognition comprised of a set of social motives and distinct emotions that mobilize behavior to manage adaptive challenges in social situations [1-2].

The social environment offers challenges and opportunities that require different and sometimes incompatible solutions. Evolutionary history shaped a motivational system to recognize relevant threats and opportunities, mobilize relevant resources, analyze trade-offs, and achieve adaptive goals [2].

The fundamental social motive framework by claims a set of social motives including self-protection, disease avoidance, affiliation, status, mate seeking, mate keeping, and kin care are functional shaped to manage the challenges and opportunities of social living. Additionally, a set of distinct emotions evolved in concert with each motive [1]. Theoretically, a social motive is activated, and a distinct emotion such as fear, happiness, esteem/pride, lust, romantic love, and tenderness is elicited automatically galvanizing and guiding physiological, cognitive, and behavioral responses to achieve an adaptive outcome.

The e-motives framework has drawn much attention and some debate. Some theorists challenge the notion of e-motivational system [3]. They argue that e-motivational system does not facilitate collective action to global social issues such as pandemics. Nonetheless, there is robust evidence supporting the idea that a live interactive (i.e., conscious) component of e-motives are high in everyday salience cross-culturally. The live interactive component involves the orchestration of (a) two or more independent agents interacting in conscious social situations, (b) distinct emotions,

and (c) responses to achieve adaptive goals. Individuals across 42 countries, for example, reported feelings of companionate love when asked about their behaviors for maintaining relationships with a romantic partner [4]. Moreover, e-motives show relevance in other kinds of online (i.e., waking) human behavior. For example, the e-motive of esteem/pride and status is positively correlated with risk-taking behaviors such as unsafe sex, substance abuse, illegal activity, and violence [5]. E-motive of esteem/pride and status; affiliation/happiness; and kin care/tenderness mobilize behaviors concerning purpose in life [6-7]. Kin-care/tenderness e-motive, for instance, increase behaviors such as parents spending time with their kids.

One e-motive does not replace another. Instead, individuals assign e-motives different priority along the lifespan. Life history trajectory such as age and sex contributes to individual differences [3]. For instance, people must continue to contribute to their physical and social needs even after they have started to mate. The activation of e-motives depends on the social goal, which mobilizes individual differences at the affective, cognitive, and behavioral level. Thus, most relevant prior work demonstrates e-motives framework as a powerful means for influencing the live interactive component of a variety of behaviors in conscious social situations [8]. Yet, relevant prior studies failed to investigate the role of fundamental social motives during unconscious social cognition. It was not known whether there was an association between e-motives and dreaming.

Materials and Methods

This work aimed to address empirical questions regarding the association between e-motives and dream content. More specifically, this work aimed to test the hypothesis that dreaming is a simulation of an active social motive to rehearse behaviors aimed at satisfying these motives. Dream content analysis is the basic method applied in psychological dream research. The method is sufficient, but several procedures are required to obtain

valid results. The present article outlined the methods including participants and procedures, development of basic global scales, data collection and sampling strategy, and statistical analysis of dream content data.

Participants and Procedure

Dream content analysis was the basic method applied in psychological dream research [9]. IRB approval according to federal regulations was acquired from Coker University Institutional Review Board. Dream content analysis met the common criteria of scientific inquiry including replication, reliability and validity, and curtailing researcher bias. The hypothesis presented in this paper involved dreaming as the simulation of active social motives (self-protection, disease avoidance, mate seeking, mate keeping, affiliation, status, and kin care) during sleep to rehearse functional behaviors aimed at satisfying these motives. The key aim of content analysis was that aspects of qualitative material (i.e., dream content) must be quantified to carry out statistical analyses.

Content Analytic Scales

Given the overarching goal to assess associations between dream content and social motives, a relatively concise measure of the extent to which a motive is indicated within a dream report was needed. Hall and Van de Castle scales the dream manual of and fundamental social motive inventory (FSMI), by was used to guide the development of a comprehensive measurement of the major dream characteristic and the social motive indicators (see Appendix A) [11].

The HVdC scale and FSMI were designed for measuring special aspects of dream content and social motives including relationship patterns and emotions. The advantage of these content analytic scales lies within their face validity.

This current study used a dream motive indicator (nominal) scale to assess the existence of social motive indicators within in dream reports and to test the hypothesis whether dream content relates to social motives including self-protection, disease avoidance, mate seeking, mate keeping, affiliation, status, and kin care. The dream motive indicator (DMI) scale, in Appendix A, measured the extent to which a social motive was reflective of the dream report.

Data Collection

Event sampling was used to observe and record most recent dream behaviors. It involved systematically and selectively documenting social motive indicators as they occurred with the most recent dream reports. The purpose of event sampling was to gain insight into the frequency social motive indicators and to analyze patterns or relationships among them. Considering the type of dream report used for the analysis might have a strong effect on the findings, the “most recent dream” (MRD) method was the primary approach for collecting dream reports. MRD provided an efficient way to collect dreams from adults in the space of 15 to 20 minutes [9].

Data Analyses

After collecting the dream reports, three judges independently rated 50 dream reports to compute interrater reliability coefficients. Rater training with subsequent discussion of the disagreements was conducted to improve interrater reliability. Subsequently judges independently rated 315 dream reports to obtain an 88% (831 of 945 agreements) interrater reliability coefficient. The Case Processing Summary table highlights how many valid and missing cases (e.g., participants) there were, as shown in table 1 below. The chi-square test of independence was used to determine whether there was an association between two nominal variables including content indicator type and social motive type.

Table 1: Case Summary

Case Processing Summary						
Cases						
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Type of content *	315	100.0%	0	0.0%	315	100.0%
Type of motive						

Results

This work aimed to test to what extent, if any, associations exist between two nominal variables. A chi-square test of independence was conducted between dream content indicator type and social motive type. All but one expected cell frequencies were greater than five. Table 2 shows there was a strong association (Cramer’s V = .731) between indicator type and type of social motive [10].

Table 2: Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	673.790a	16	<.001
Likelihood Ratio	603.825	16	<.001
Linear-by-Linear Association	106.115	1	<.001
N of Valid Cases	315		
Cramer's V	.731		<.001

Note. 1 cells (4.0%) have expected count less than 5. The minimum expected count is 4.40.

General Discussion

It was hypothesized that dreaming is a simulation of an active social motive about self-protection/disease-avoidance; affiliation; status; mating (seeking and keeping); or kin care to rehearse behavior aimed at satisfying the motive. In order to more easily understand the various aspects of the association between dream content and social motives, table 3 below shows the frequencies for the observed dream content indicators and motive dream type.

Self-Protection Motive

Considering that self-protection motive should produce vigilance to threats results showed that aggression indicators occurred more frequently in dream reports categorized as self-protection dreams (n = 69) [11]. Dream reports marked as self-protection motive mostly involved a deliberate, intentional act to avoid harm, do harm, or annoy some other character as well as promoting health related activities. Self-protection dreams included experiencing or perpetrating physical aggression such as screaming at someone, punching or forcefully shoving someone, or engaging in a physical fight.

In sum, dream reports categorized as self-protection motive involved characters engaging in a variety of behaviors related to protecting themselves from dangerous others. As such, dreaming may be a simulation of an activate self-protection motive to rehearse behavior aimed at satisfying life history strategies. The responses below are two dreams that was categorized as self-protection dreams from the same participant.

- I'm driving into Ohio on I 75 south and a tornado is chasing my mom and I. We get into Cincinnati and the tornado kills my mom and then kills me. Then everything goes black and all I can see is my headstone, but it just shows the day I was born and the date I died is blurred out.
- I've also had a dream where I'm running in the woods trying to escape an ex-boyfriend who was really mean to me.

Mating Motive

According to People higher on mating motive were more likely to report a number of behaviors indicative of mating effort involving companionship or a need to belong [11]. Dream reports grouped as mating motive were biased toward friendliness/sexuality indicators (n = 49) such as lustful behaviors including engaging in sexual intercourse, sexual fantasies, dating, or companionate love-oriented behavior (i.e., gift buying, or concerns of infidelity, gift buying). This array of results suggests that dreaming may be a simulation of an active mating motive aimed at satisfying a breakup concern, sociosexual strategies [12]. The response below was from a dream report that was categorized as a mate-keeping dream.

Although I don't know the exact date of this dream, I know it occurred a couple of months ago in November 2024, I also recalled this dream as soon as I woke up that morning in my bed. During this dream, I was in my room for most of the day. My room is gray with white furniture, my bed in a corner, a beanbag in another corner, and a large window in the middle of one of the walls. My current boyfriend, who is about 6' and has brown hair and brown eyes, was cheating on me with two other girls. I remember finding his phone when he came over to my house and seeing these girls on his phone and seeing pictures of them. Both of the girls were blondes and about 5'5", and I don't think they knew each other or about each other. I did not know who either girl was. I then confronted my boyfriend about it, and he told me he didn't love

me anymore and that he never did in the first place. This was very hurtful, and in the dream I got super upset and I think I kicked him out of my house. When I woke up I fully believed this had happened and confronted him about it, and he said it wasn't true.

Kin Care Motive

The frequencies of different family members in dreams are correlated with the closeness between the dreamer and family members including offspring, parents, siblings, grandparents, and close friends. Interactions with these family members, for person with an active kin care motive, include friendliness such as a feeling of deep affection, gentleness, and kindness, an intentional act of warmth, kindness, or goodwill toward family. Friendliness indicators occurred more frequently in dream reports labeled as kin care (n = 17) as opposed to dream reports categorized as self-protection (n = 1), affiliation and status (n = 0) motives. These results suggests that dreaming may be a simulation of an active kin care motive aimed at satisfying need for family approaches.

Note that the majority of these statistical associations held even when controlling for all other motives, (see Table 3) and that affiliation motive uniquely predicted none of these motive indicators including aggression and friendliness/sexuality, providing further evidence for the utility of a distinction between self-protection, mating, kin care, and affiliation motives. The response below was from a dream report that was categorized as a kin-care dream.

I dreamt I was standing on a quiet piece of land with tall grass swaying gently in the wind and wildflowers growing vibrant in the distance. The sky above was clear, the sun warm on my face. I could see the faint outline of a small house, only a foundation and some beams so far. I started working with my hands, gathering wood and tools, hammering nails into place. As the walls began to come together, my loving husband walked through the door smiling and handing me a cup of coffee. The house came together quickly. We built rooms for everything we dreamed of: one for a nursery, another for family dinners. As the night came when the house was finished we put on a movie and our kids crawled into bed, filling the air with giggles.

Affiliation Motive

Evidence suggest that affiliation is associated with group-based behaviors (i.e., playing a team sports, attending religious groups, etc.) concerning high rejection sensitivity such as defriending on social media [11]. Dream content indicators regarding group-based activities such as attempts to befriend group members resulting in happiness, or expressing sensitivity to defriending by others resulting in unhappiness occurred more frequently within dream reports classified as affiliation motive (n= 42). These results provide further evidence that dreaming may be a simulation of an active affiliation motive aimed at satisfying interpersonal-belonging strategies. The responses below are from dream reports that was categorized as an affiliation dream.

- Setting the back yard at home. A group of neighbors are over visiting. I start pushing some sort of cart down the driveway when a green car turns up the drive. The driver is A (mentioned in earlier dreams). He keeps coming ahead and slowly pushes me and the cart back into the yard (in a spirit of fun). He gets out of the car and I go to find him expecting to be greeted with some warmth, since we had not seen each other for a year, but he is not particularly affectionate. I decide that this is because of the other people around, particularly

my mother. I mention to him that I had just sent him a letter since I wasn't expecting him home for several weeks yet and he just shrugs. There are several small children in the yard and we amuse ourselves by playing games with them

- I dreamt that I was in some Oriental country and that I was going to an Indian church. I had seemingly been to the church before and was rather scared as I had caused a disturbance and been beaten up. There were quite a few other church groups, but I chose this one. I was sure that I would get into trouble, but a friend of mine went along. He got along quite famously with the leader, but I seemed to have trouble. There was quite a bit of feeling towards me. I finally left. I thought I would be in trouble, but my friend pacified the crowd. We went on our way.

Status Motive

Additionally, people more motivated to attain status reported being higher on strategies including dominance and prestige [11], public displays of competence or incompetence, and risk-taking behaviors such as unsafe sex, substance abuse, illegal activity, and violence [5]. Dream reports categorized as status motive

frequently contained indicators involving prideful activities that express misfortune/failure such as injury, mishap, or adversity occurs unexpectedly or through circumstances beyond control (n = 50) or good fortune/success such as a positive outcome of any intentional striving by the character or something good occurs unexpectedly or through unintentional circumstances (n = 41). The results indicated that dreaming may be a simulation of an active status motive aimed at satisfying strategies for getting-ahead. The response below was from a dream report that was categorized as a status dream.

I had a dream that I was at a softball/baseball complex that I know extremely well. Me and all of my teammates (all teenage girls) were warming up before the game. My coach (male 54) was throwing me warmup balls. I misfielded a ball and he starts screaming at me and saying all of these horrible things about me. He said I wasn't good enough to play in college and that I wasn't giving enough effort, and I should just quit. It was almost like DeJa'Vu because the whole scene happened the very next week, except my coach didn't yell at me. I don't know why I dreamt that because I love my coach, and he would never do that to me in real life.

Table 3: Frequency of Indicator Type and Dream Motive Type

Type of content * Type of motive Comparison			Type of social motive					Total
		Self-protection	Mating	Affiliation	Status	Kin Care		
Type of dream content	Aggression	Count	69	3	0	0	1	73
	Friendliness/ Sexuality	Count	1	49	0	0	17	67
	Misfortune/ Failure	Count	5	2	11	50	11	79
	Good Fortune/ Success	Count	1	0	8	41	4	54
	Befriender/ Defriend	Count	0	0	42	0	0	42
Total		Count	76	54	61	91	33	315

Conclusion

This current work presents a novel perspective on the association between dream content and social motives. The evidence suggests that dreaming is a simulation of an active social motive to rehearse behaviors aimed at satisfying the motive. We believe that a comprehensive understanding of dreaming requires the acknowledgement of the role of an evolved motivational system during unconscious social cognition (i.e., dreaming).

Finally, this current work involved being highly skilled perceivers of others' motives. Of course, it is quite possible that these motives often operate outside awareness. That said, we had many opportunities to observe others' behavior and to draw inferences about their motives or qualities, and if assumptions about their motives were unreliably, it is unclear how the coherent patterns of results in the current work would emerge. Indeed, the utility of understanding others' motivations for predicting their future behavior suggests that people are likely to be fluent in detecting and assessing both our own and others' motives. In support of this idea, one study of self and other ratings of the fundamental social motives shows that perceivers are substantially accurate in assessing the social motives of close others. Nonetheless, the extent to which people have inaccuracies in perceiving their own and others' motives for either motivated or informational reasons remains an open question and one worthy of future research.

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Data Availability

The data that support the findings of this work are available from the corresponding author upon reasonable request. All data were gathered from publicly available databases.

Appendix A

The DMI scale below was used to measure the extent to which each type of indicator was reflective of the dream report.

Dream Content Indicator	Social Motive Indicator
<ul style="list-style-type: none"> Aggression - A deliberate, intentional act to avoid harm, do harm, or annoy some other character as well as promoting health related activities. 	<ul style="list-style-type: none"> Self-protection – Feeling of fear or anxiety concerning the outcome of something or the safety and well-being of self/others. Aggressive activities to protect (i.e., avoid harm, do harm, or annoy) from danger. Health related activities such as going to gym, getting flu shot, or avoid smoking or shaking hands.
<ul style="list-style-type: none"> Friendliness/Sexuality - An intentional act of warmth, kindness, and goodwill toward family. Some type of physical or fantasized sexual interaction. 	<ul style="list-style-type: none"> Mating – A feeling of deep affection, gentleness, and kindness. Lustful behaviors including engaging in sexual intercourse or sexual fantasies; dating. Companionate love-oriented behavior such as gift buying, or concerns of infidelity, gift buying.
<ul style="list-style-type: none"> Failure/Misfortune - A negative outcome of any intentional striving by the character. Injury, mishap, or adversity occurs unexpectedly or through circumstances beyond control. 	<ul style="list-style-type: none"> Affiliation - Group based activities such as attempts to befriend group members resulting in happiness or expressing sensitivity to defriending by others resulting in unhappiness.
<ul style="list-style-type: none"> 4. Success/Good Fortune - A positive outcome of any intentional striving by the character. Something “good” occurs unexpectedly or through unintentional circumstances. 	<ul style="list-style-type: none"> 4. Status - Proudful activities that express success or failure such as public displays of competence or incompetence.
<ul style="list-style-type: none"> Befriend/Defriend - A deliberate attempt to find favor among a group or A deliberate attempt to avoid removal from a group/ relationship. 	<ul style="list-style-type: none"> Kin-care - Acts of tenderness, warmth, kindness, and goodwill toward family or the misfortune of having a family member die

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