Morale as a Social Contagion:

Development of a Scale to Measure the Transfer of Morale in the Workplace

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Abstract

This study was conducted to further research on morale contagion in the workplace, to better understand the relationship between individuals' emotions and the impact those emotions have on coworkers. The Morale as a Social Contagion Scale (MSCS) was developed to specifically target the interpersonal transfer of enthusiasm, sense of purpose, and confidence in the workplace. The MSCS was distributed along with four other scales to assess construct validity. Through exploratory factor analysis, an emerging factor named Group Influenced Engagement (GIE) showed the most support for the MSCS. Comprised of 15 items, the GIE was the most intercorrelated factor with Cronbach's Alpha of .90. For future research on morale contagion in the workplace, the 15 item GIE could be implemented when trying to measure the influences of engagement, job satisfaction, social connectedness, and personal efficacy as a single construct.

Keywords: workplace. morale, enthusiasm, sense of purpose, and confidence, engagement

Introduction

Organizations and workplaces are filled with emotions which affect the employees and organization. These emotions can be transferred between employees as well as back and forth with leaders (Humphrey et al., 2020). Humphrey et al. (2020) described how leaders might influence the emotions and moods of their associates in both positive and negative ways. Thus, this process of emotional transfer is defined as social contagion. Social contagion can include automatically synching facial expressions, vocalizations, postures and gestures with those of another person (González-Morales et al. 2012). Social contagion can happen when employees communicate with each other either digitally or in-person (Villafranca, 2016). Villafranca (2016) explores how contagion works with disease as well as within social networks. Compared to disease contagion, social contagion is more than just who the person was in contact with. It can rely on personality, closeness of the relationship, and situational factors to make the person more susceptible. Villafranca describes how individuals have varying levels of susceptibility to contagion – especially when in close contact.

In accordance with Gonzáles et al. (2012), Barsade (2002) established that emotions such as fear and burnout, are more contagious than positive emotions such as joy. A lot of the research focuses on this transfer of negative emotions, like exhaustion and cynicism, leading to burnout (González-Morales, M. G., Peiró, J., Rodríguez, I., & Bliese 2012). This contagion can lead to higher attrition when employees see others quitting (Villafranca, 2016). According to Probst (2005), there is a lack of knowledge and research on how contagion is related to positive attributions (e.g., joy, morale, motivation). Because of this gap in research on positive emotion, such as engagement and morale, the researchers aimed to gain understanding on how morale can be contagious in the workplace.

In the study, the researchers, expanded the definition of social or emotional contagion and focus on how morale might be contagious between employees. According to the APA, morale is described as the level of enthusiasm, sense of purpose, and/or confidence in the worthiness of a goal that can affect a person's or a group's overall performance in working toward that goal - especially when under pressure. We have defined morale contagion as the interpersonal transfer of enthusiasm, sense of purpose, and confidence in an organizational setting and its influence on group dynamics.

To study the impact of morale contagion, the researchers created a new survey. This survey includes newly developed items measuring confidence, sense of purpose, and enthusiasm. We integrated these items with those from external scales measuring job in general characteristics, social connectedness, personal efficacy, and job engagement. We distributed this survey to existing students at our university who volunteered to complete the survey.

Job in General (JIG) Scale

Job satisfaction is covered extensively in previous research and literature. Ironson, et al. developed the job in general scale to complement the Job Descriptive Index Scale. The job in general scale is a global scale to measure overall feelings of the job, and these feelings are expected to predict certain behaviors such as quitting or calling in sick. For our purposes, we were mostly focused on items related to job satisfaction (Ironson, et al, 1989).

Lee & Robbins Revised Social Connectedness Scale

The social connectedness scale measures the relationship between anxiety, identity, and self-esteem. According to the study by Lee and Robbins social connectedness was positively related to self-esteem. The items from this scale measure such things as togetherness, a sense of belonging, relatedness, connection, and approachability (Lee & Robbins, 1998).

Riggs et al Personal Efficacy Beliefs Scale

Riggs developed scales to assess self-efficacy for both individuals and groups based off several studies. The items in our scale measure the employees' perception of such things as skills, performance, expertise, and abilities.

The Rich et al Job Engagement Scale

According to Lepine and Crawford, job engagement measures the investment an individual has in their role. They found that engagement shows a stronger relationship with performance based on their study of 245 firefighters and their supervisors (2010). The Rich et al. Job Engagement Items in our scale measure such things as enthusiasm, energy, pride, and excitement for their job.

As mentioned, current research focuses on contagion related to burnout or other negative emotions. We expect organizations to use our construct to see how employees might affect each other in more positive ways. Our new construct can help organizations determine the level of morale contagion, and if low, figure out a plan for raising it. Ultimately, this can lead to less burnout and attrition.

Hypotheses

After a review of the available literature, the following were hypothesized:

Hypothesis 1: The dimensions of the Morale as a Social Contagion Scale will be positively correlated with each other.

Hypothesis 2: The Morale as a Social Contagion Scale will be correlated with job engagement.

Hypothesis 3: The Morale as a Social Contagion Scale will be positively correlated with personal self-efficacy.

Hypothesis 4: The Morale as a Social Contagion Scale will be positively correlated with social connectedness.

Hypothesis 5: The Morale as a Social Contagion Scale will be positively correlated with job satisfaction.

Because we are proposing a new scale, we do not yet know the internal reliability or scale validity. To determine whether our scale is an accurate measure of morale as it pertains to social contagions, we conducted an exploratory factor analysis. Based on the literature, we hope that the internal factors, if any, will reflect a socially contagious morale effect as a whole.

Methods

Participants

Participants were recruited from a mid-sized Midwestern University, via SONA, an online research management system. Participants were able to receive course credit for participating in this study by fully responding to the survey. While 326 people initially responded to the survey, 38 were omitted due to missing data and age restrictions. The total number of participants included in the analysis was 288. 165 participants (57.3%) were 18 years old, 71 (24.7%) were 19 years old, 21 (7.3%) were 20 years old, 16 (5.6%) were 21 years old,7 (2.4%) were 22 years old, and 8 people (2.5%) were older than 22 years old with the oldest participant being 49 years old.

From the 288 participants, 88 identified as male (30.6%), 184 identified as female (63.8%), 8 identified as non-binary (2.8%), and 5 identified as transgender (1.7%), prefer not to say, or other 3 (1.1%).

The ethnicities for our sample were 223 white (77.4%), 25 black or African American (8.7%), 23 Asian (8.0%), 11 Hispanic or Latino (3.8%), and were American Indian or Native American 1 (.3%), 5 prefer not to say, or other (1.7%).

Scale Development Process

The Morale as a Social Contagion Scale was created explicitly for this study to investigate respondents' confidence, sense of purpose, and enthusiasm in the workplace. For confidence, 13 items were created in order to measure respondents' confidence in the workplace. For sense of purpose 14 items were created in order to measure respondents' sense of purpose in the workplace. For enthusiasm 14 items were created in order to measure respondents' enthusiasm in the workplace. The Morale as a Social Contagion Scale consisted of 41 single items that were presented with the following stem "When I am at work …." Respondents rated items using a 7-point Likert format ranging from 1 (*strongly agree)* 4 (*neutral*) and 7 (*strongly disagree)*. Fourteen items were reversed scored.

External Construct Measures

Job Engagement Scale

The Job Engagement Scale assessed the investment an individual has in their role. Of the original 18 items, the researchers used 6, using a 7-point Likert format ranging from 1 (*strongly disagree)* 4 (*neutral*) and 7 (*strongly agree)*. An example item is, "When I am at work, I am enthusiastic in my job".

Job in General Scale

The Job in General Scale measures certain characteristics such as how pleasant, bad, and ideal the employee's job is currently. This is intended to gauge how satisfied an employee is with their job. The researchers included all 18 items using the stem "Imagine you are at your current

job and working with your immediate supervisor. Overall, what is it like most of the time?"

Choices were presented in a 3-point multiple choice format with the choices being "Yes",

"Cannot Decide", and "No".

Personal Efficacy Beliefs Scale

The Personal Efficacy Beliefs scale assesses self-efficacy for both individuals and

groups. Moreover, the scale measures employees' own self-efficacy regarding skills,

performance, expertise, and abilities. The researchers included all 10 items, using a 7-point

format ranging from 1 (*strongly disagree)* 4 (*neutral*) and 7 (*strongly agree)*. An example of an

item is "When I am at work, I am very proud of my job skills and abilities".

Social Connectedness

The Social Connectedness Scale measures the relationship between anxiety, identity, and

self-esteem. The researchers included all 20 items, using a 7-point format ranging from 1

(*strongly disagree)* 4 (*neutral*) and 7 (*strongly agree)*. An example of an item is "When I am at

work, I can catch myself losing sense of connectedness with society".

Procedure

The researchers obtained approval from the Institutional Review Board (IRB) before

recruiting participants. An announcement was posted on SONA, which allows researchers to

anonymously recruit participants for research studies. To participate, a student was directed to

click on a digital link that directed them to the survey presented in Qualtrics. Before proceeding,

participants were given a consent form and were able to select "I consent" or "I do not consent".

If they consented to participating, they would be directed to the survey questions. After

completing the survey, participants were given credit regardless of completion.

Results

Descriptive Statistics

The Job Engagement Scale (M = 16.58, SD = 7.66, a = .95) consisted of 18 items total, however we only included the items for the Emotional Engagement subscale which consisted of 6 items. The Revised Social Connectedness Scale (M = 65.40, SD = 19.36, a = .92) consisted of 20 items with 10 items as normal and 10 items as reverse coded. The Personal Efficacy Beliefs Scale (M = 31.57, SD = 8.71, a = .80) consisted of 10 items with 4 items as normal and 6 items as reverse coded. Lastly, Job in General Scale (M = 28.62, SD = 7.19, a = .91) consisted of 18 items with 10 items as normal and 8 items as reverse coded. No changes were necessary to make in order to improve the reliability of these scales as all showed moderate to strong reliability, which is indicated by their corresponding alpha levels.

Before conducting any correlation analyses, Job Engagement was transformed by taking the square root of each value due to its positive skew and the new variable was named SQRTJobEng. However, it was found that this transformation had no meaningful impact on the rest of the analyses. The external constructs showed significant intercorrelations amongst them. Job Engagement significantly correlated with Personal Efficacy (r = .15, p < .01), Social Connectedness (r = .33, p < .01), and Job Satisfaction (r = .69, p < .01). Personal Efficacy correlated with Social Connectedness (r = .31, p < .01) and Job Satisfaction (r = .21, p < .01). Social Connectedness correlated with Job Satisfaction (r = .31, p < .01).

Exploratory Factor Analysis and Intercorrelations

Using SPSS, an exploratory factor analysis was conducted on all three subscales that were developed in the present study. First subscales were factor analyzed using principal axis factoring with Oblimin rotation and Kaiser Normalization. Eight initial factors were found in

eight iterations for the Morale as a Social Contagion Scale. A rotated solution was converged in 36 iterations. Four factors emerged that met the threshold of concrete factors after further investigation into the total variance explained by each. Items that had a factor loading of .35 or greater and did not cross load on other factors at .30 were interpreted as meeting the minimum statistical criteria to load on a single factor. The fourth factor failed to meet the necessary criteria and was therefore excluded as one of the single concrete factors. Factor one explained 25.36% of the variance, factor two explained 10.21% of the variance, and factor three explained 6.65% of the variance. Figure 1 shows the screen plot that gives a visual representation of the cutoff point for factor loadings meeting the necessary criteria.

An exploratory factor analysis was also conducted on the subscale of the Morale as a Social Contagion scale using principal axis factoring with Varimax rotation and Kaiser Normalization. The rotated solution converged in 9 iterations. This factor analysis did not yield results differing from the first, so the exploratory factor analysis results are described in this paper.

Three concrete factors emerged from the exploratory factor analysis for the Morale as a Social Contagion Scale with a total of 22 items. Factor one consisted of 15 items: E1, E3, E4, E5, E6, E7, E8, C5, C12, SP1, SP2, SP4, SP5, SP6 and SP7 ($M = 34.27$, $SD = 10.84$, $a = .90$) and was labeled "Group Influenced Engagement". Factor two consisted of four reverse coded items: SP8, SP9, SP10, and SP14 ($M = 16.05$, $SD = 4.29$, $a = .62$) and was labeled "Contagion Acceptance". Factor three consisted of two reverse coded items E10 and C13, and one normal item C11 ($M = 12.84$, $SD = 2.38$, $a = .56$) and was labeled "Contagious Anxiety Sensitivity". The items in factor three initially estimated an alpha coefficient of -.43, therefore the reverse coded items were coded normally to achieve an alpha coefficient of .56.

The intercorrelations found in factor one between items ranged from .173 to .715, which suggests a moderate to strong positive relationship between the items and that they are moderately related in this factor. For factor two, the intercorrelations between items ranged from .143 to .396, which indicates a moderate positive relationship amongst the items and that the items in this factor are moderately related. Item intercorrelations for factor two ranged from .262 to .368, indicating a moderately positive relationship between items and that the items are moderately related.

Pearson correlation coefficients were used to discover significant correlations between the factors of the Morale as a Social Contagion Scale as well as with the external scales. Factor one correlated with factor two weakly ($r = -.19$, $p < .05$) and factor three moderately ($r = .42$, $p < .05$). Factor two correlated with factor three weakly ($r = -.17$, $p < .05$). Factor one, Group Influenced Engagement, correlated significantly with Job Engagement ($r = .52$, $p < .01$), Personal Efficacy ($r = .14$, $p < .05$), Job Satisfaction ($r = .35$, $p < .01$), and Social Connectedness ($r = .38$, $p < .01$). Factor two, Contagion Acceptance, correlated significantly with Job Engagement ($r = .17$, $p < .01$), Personal Efficacy ($r = .19$, $p < .01$), Job Satisfaction ($r = .15$, $p < .05$), and Social Connectedness ($r = .13$, $p < .05$). Factor three, Contagious Anxiety Sensitivity, significantly correlated with Personal Efficacy ($r = .29$, $p < .01$) and Social Connectedness ($r = .15$, $p < .05$). Factor three did not correlate significantly with Job Engagement or Job Satisfaction.

Discussion

The exploratory factor analysis presented a variety of results regarding the three emerging factors which seems to support some aspects of our proposed scale while also potentially invalidating other suggested items and intercorrelate relationships. Of the three

emerging factors, the first, labeled Group Influenced Engagement (GIE) offers the most support for our original proposal of the Morale as a Social Contagion Scale (MSCS). Most notably, this is due to the greater number of items which loaded onto Group Influenced Engagement (15) in comparison to the other factors of Contagion Acceptance (4) and Contagion Anxiety Sensitivity (3). Additionally, GIE represents the most intercorrelated factor among our results with a Cronbach's Alpha of .90, suggesting that it is also the strongest factor from our analysis. This is in contrast to the other factors which had alpha scores of .62 and .56, generally below the acceptable level of reliability for scale development. Therefore, our key findings focus primarily on GIE and its accompanying items.

Five hypotheses were developed in coordination with the study which outlined the expectations of the research team. The first of these hypotheses predicted that the dimensions of the Morale as a Social Contagion Scale would all correlate positively with each other. The results of the study showed otherwise. Contagion Acceptance correlated negatively with both Group Influenced Engagement and Contagion Anxiety Sensitivity. Therefore, we failed to reject the null hypothesis for H_1. The following four hypotheses all separately predicted that the Morale as a Social Contagion Scale would be positively correlated with each of our external scales relating to job engagement, personal self-efficacy, social connectedness, and job satisfaction. The results of the study indicated that all four external scales correlated positively with each component of the Morale as a Social Contagion Scale and therefore we rejected the null hypotheses for H_2, H_3, H_4, and H_5.

To account for scale validity, the analysis also included a series of external scales through which the factors were compared. By calculating Pearson correlation coefficients between the external scales and factors, it was possible to develop a relative baseline of the conceptual

content of the factors. It is through such Pearson correlations that the naming conventions for the factors were considered. For example, GIE correlated significantly (.52) with the external job engagement scale and so it was determined that engagement should be a descriptor of the first factor. The first factor also correlated significantly with personal efficacy (.14), job satisfaction (.35), and social connectedness (.38). Specifically, job satisfaction and social connectedness had stronger correlations with factor one than factors two and three. Therefore, the correlations suggest that GIE contains a combination of items related to job engagement, social connectedness, and job satisfaction. The original definition used to describe the proposed Morale as a Social Contagion Scale contained hypothesized dimensions expressed as enthusiasm, sense of purpose, and confidence all within the context of interpersonal transfer. While the items were developed separately with these three proposed dimensions in mind, the results indicate that aspects of all three hypothesized dimensions loaded onto GIE considerably, while only loading onto factors two and three minimally. This evidence is reflected in the number of items in each scale, as mentioned previously. Overall, the correlations of GIE with the external scales satisfied the expectations of the hypothesized scale, thereby confirming the contents of the hypothesized scale while invalidating the proposed dimensions. For this reason, GIE represents the only factor that upholds the validity and reliability standards for scale development and should therefore be considered as its own 15-item scale.

This study suggests that a Group Influenced Engagement Scale (GIES) could be implemented in organizations to measure the influences of engagement, job satisfaction, social connectedness, and personal efficacy as a singular construct. For all intents and purposes, this scale functions like the originally proposed MSCS contents, but it has been greatly simplified with the original three dimensions condensed into a single unidimensional scale. Fortunately, the

content of the newly proposed GIES contains items from all three original dimensions (enthusiasm, sense of purpose, and confidence) of the MSCS thereby demonstrating some dimensional similarities. However, it should be noted that GIE contains only 2 confidence items at approximately 13% of the total scale which is a major divergence from the originally proposed scale at approximately 33% confidence items. Therefore, the newly proposed GIES is much less confidence dependent than our hypothesized scale.

Potential Limitations

There are several limitations that may have impacted the development of the MSCS. The first of these limitations came with the original proposal for the definition of Morale as a Social Contagion. To determine the definition that would be used for the construct, APA resources were utilized to define the morale component to include enthusiasm, confidence, and sense of purpose. Through these three dimensions, the items for the MSCS were written. This approach to item development was problematic as it relied directly on researcher interpretation of APA language and assumed that the APA definition of morale referred to the dimensions of enthusiasm, confidence, and sense of purpose as proven components. While all three of these dimensions loaded onto factor one, confidence did not load nearly as much as the other factors with only 2 of the 15 items representing confidence. Additionally, it was hypothesized that each of the dimensions would load separately onto different factors, however the results demonstrated that GIE loaded items from all three dimensions of morale. It might be that this is a consequence of relying too heavily on the language of the APA resources instead of conducting a proper literature review or meta-analysis of morale and social contagion-related scales.

Another limitation of this research is present in the demographic data of the survey responses. Due to the fact that data was collected through SONA, the average age of participants

in this study was approximately 19 years old. Such an age bias may impact the validity of the

data due to the limited work experience of younger participants. As such, the results of this study

may not be generalizable to standard workforce populations. Furthermore, the responses

included a gender bias in that 63.8% of respondents identified as female with only 30.6%

identifying as male. To account for these demographic limitations, future studies should consider

collecting data more precisely from a balanced sample of participants in both age and gender.

Future Research

Noting the potential limitations of the study, future research should seek to implement

countermeasures to ensure that item development is based on supported research and that

participant demographics are generalizable to standard workforce populations. Relatedly, future

research should aim to test correlations of other scales with the newly proposed Group

Influenced Engagement Scale. To identify potential scales with which to compare the GIES, an

extensive literature review or meta-analysis of the components of morale and social contagions

should be conducted. Lastly, it would be appropriate to attempt to replicate the results of this

study to confirm the reliability of the items in the GIES.

Conclusions

Overall, the scale development and exploratory factor analysis of the proposed Morale as

a Social Contagion Scale provides opportunities for future research that will help to shed light on

the impact of morale as a social contagion in the workplace. While the original structure of the

MSCS was not maintained, the results indicate that the newly proposed 15-item Group

Influenced Engagement Scale significantly correlates with all four external scales relating to job

engagement, job satisfaction, personal efficacy, and social connectedness. Additionally, the

GIES maintains a Cronbach's Alpha of .90 which demonstrates solid reliability. Therefore, it can

be said that the study was successful in the development of a scale which measures the

components of morale as a social contagion, although the organization of said components was

different than what was hypothesized in the study.

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Tables

Table 1

Number of items, scale means, standard deviations, and reliabilities (a) for the external scales.

External Scale	# Items	M	SD	a
Job Engagement Items	6	16.58	7.66	.95
Personal Self-Efficacy Beliefs	10	31.57	8.71	.80
Revised Social Connectedness Scale	20	65.40	19.36	.92
Job in General Scale	18	28.62	7.19	.91

Table 2

Correlations between the external scales.

	JE	PE	SC	JG
JE		.15**	.33**	.69**
PE	.15**		.31**	.21**
SC	.33**	.31**		.31**
JG	.69**	.21**	.31**	

*Note: Significant correlations at p < .01 appear with ** *

Table 3

Number of items, factor means, standard deviations, reliabilities, and mean interitem correlations for the Morale as a Social Contagion Scale.

Factor	# Items	M	SD	a	Mean r
F1	15	34.27	10.84	.90	.40
F2	5	16.05	4.29	.62	.29
F3	3	12.84	2.38	.56	.30

Table 4

Correlations between factors of the Morale as a Social Contagion Scale and the external scales.

	Job Engagement	Personal Efficacy	Social Connectedness	Job Satisfaction
F1: Group Influenced Engagement	.52**	.14*	.38**	.35**
F2: Contagion Acceptance	.17**	.19**	.13*	.15*
F3: Contagious Anxiety Sensitivity	.03	.29**	.15*	.09

Note: Significant correlations at p < .01 appear with **
   Significant correlations at p < .05 appear with *

Table 5

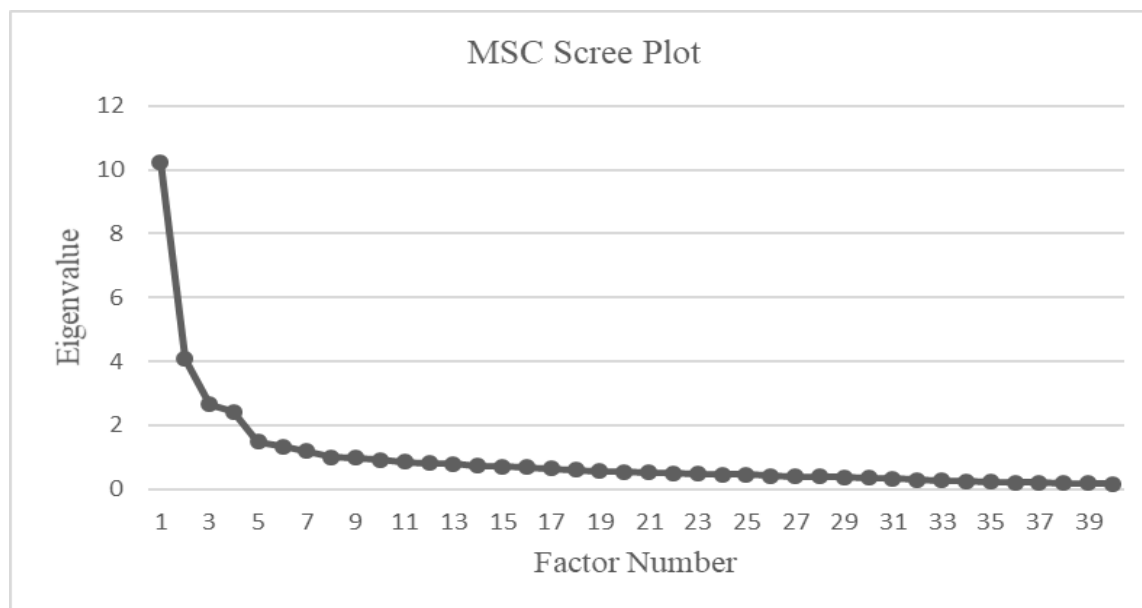*Factor loadings of items in the Morale as a Social Contagion Scale.*

Item	Factor 1	Factor 2	Factor 3
E1	.627		
E3	.638		
E4	.564		
E5	.624		
E6	.712		
E7	.725		
E8	.694		
C5	.516		
C12	.505		
SP1	.658		
SP2	.502		
SP4	.672		
SP5	.656		
SP6	.671		
SP7	.385		
SP8		.575	

SP9	.521	
SP10	.444	
SP14	.501	
E10		.403
C11		.366
C13		.388

Figures

Figure 1

Displays Eigenvalues for factors on the Morale as a Social Contagion Scale.

Appendices

Workplace Morale Scale (7-point Likert response format SA to SD)

When I am at work...

1. Being around confident people helps me feel more self-assured

2. If my team is confident, I feel more assured that we complete our work

3. I feel more confident when my peers trust me

4. I feel more secure when my coworker tells me they believe in me

5. I feel more secure in myself when working in a group

6. Seeing teammates succeed makes me feel more self-assured

7. Seeing my teammates feel confident in their abilities to perform their jobs makes me feel more confident in my abilities to perform mine

8. Positive feedback from coworkers makes me feel more secure

9. Others' self-confidence in their jobs enhances my sense of self-confidence

10. If I feel my supervisor doesn't trust me, then I do not feel assured that I am performing my job well

11. I feel discouraged to express ideas when a teammate receives negative feedback for their ideas

12. When my teammates come to me for guidance, it makes me feel self-assured in my work abilities

13. When my manager or teammates watch me perform my job, I fear that I will make mistakes

14. Seeing someone else pursue their goals inspires me to pursue my goals

15. I benefit when my personal goals align with the company goals

16. Others inspire me to make a difference in the company

17. I enjoy teams that share a sense of purpose

18. I appreciate setting goals as a team

19. My job has more meaning when my team's goals and mine align

20. Having a group goal is more meaningful than a personal goal

21. I don't care if my teammates are pursuing the same team goal

22. If my coworkers don't find meaning in their job it doesn't bother me

23. Seeing others set and achieve goals does not affect me

24. It's not important if my team and I have the same goals

25. It doesn't affect me when my coworkers are not achieving our shared goals

26. I don't care if my goals align with the company mission

27. If my teammates feel their jobs are meaningless, then I feel the same

28. I am more motivated to work on a project when a teammate is enthusiastic about the
    project

29. My team seems more enthusiastic if at least one person in the team is

30. It is easier to become immersed in my work when I see my coworkers immersed in theirs

31. The culture of my company helps increase my enthusiasm for my job

32. I want to take on new tasks when I see my teammates do the same

33. Seeing my teammates passionate about their work makes me more passionate about
    mine

34. Others' inspiration on the job makes me feel more inspired with my work

35. Hearing my teammates express pride in their work makes me feel more prideful in mine

36. Seeing someone else being enthusiastic drains me

37. If a teammate is in a negative mood, it will likely bring my mood down too

38. My enthusiasm for my work depends on who I am assigned to work with

39. I dread performing my job if I know that my teammates do not like their jobs as well

40. Others' enthusiasm about their jobs does not affect me

41. I do not care about how my teammates feel about their jobs

Job Engagement Items (7-point Likert response format SA to SD)

People differ in the extent to which they are involved in their jobs. How do you view your job in the workplace? For the items that follow, please indicate the extent to which they describe you...

1. I am enthusiastic in my job

2. I feel energetic at my job

3. I am interested in my job

4. I am proud of my job

5. I feel positive about my job

6. I am excited about my job

Personal Efficacy Beliefs Scale (7-point Likert response format SA to SD)

People differ in the way they view their abilities at work. How do you view your abilities when you are at work? For the items that follow, please indicate the extent to which they describe you...

1. I have confidence in my ability to do my job

2. There are some tasks required by my job that I cannot do well

3. When my performance is poor, it is due to my lack of ability

4. I doubt my ability to do my job

5. I have all the skills needed to perform my job very well

6. Most people in my line of work can do this job better than I can

7. I am an expert at my job

8. My future in this job is limited because of my lack of skills

9. I am very proud of my job skills and abilities

10. I feel threatened when others watch me work

Revised Social Connectedness Scale (7-point Likert format SA to SD)

People are different in how they relate to others. How do you feel you relate to others in the workplace? For the items that follow, please indicate the extent to which they describe you...

1. I feel comfortable in the presence of strangers

2. I am in tune with the world

3. Even among my friends, there is no sense of brother/sisterhood

4. I fit in well in new situations

5. I feel close to people

6. I feel disconnected from the world around me

7. Even around people I know, I don't feel that I really belong

8. I see people as friendly and approachable

9. I feel like an outsider

10. I feel understood by the people I know

11. I feel distant from people

12. I am able to relate to my peers

13. I have little sense of togetherness with my peers

14. I find myself actively involved in people's lives

15. I catch myself losing a sense of connectedness with society

16. I am able to connect with other people

17. I see myself as a loner

18. I don't feel related to most people

19. My friends feel like family

20. I don't feel I participate with anyone or any group

Job in General Scale

Imagine you are at your current job and working with your immediate supervisor. Overall, what is it like most of the time? Please select "Yes", "Cannot Decide", or "No" for the word or phrase that best describes, in general, what your job is like at your current company.

Mark "Yes" if it describes your job.

Mark "Cannot Decide" if you are unsure if it describes your job.

Mark "No" if it does NOT describe your job.

1. Pleasant

2. Bad

3. Ideal

4. Waste of time

5. Good

6. Undesirable

7. Worthwhile

8. Worse than most

9. Acceptable

10. Superior

11. Better than most

12. Disagreeable

13. Makes me content

14. Inadequate

15. Excellent

16. Rotten

17. Enjoyable

18. Poor

Morale as a Social Contagion Factors and Items

Factor 1: Group Influenced Engagement

C5 – I feel more secure when my coworker tells me they believe in me

C12 – When my teammates come to me for guidance, it makes me feel self-assured in my work abilities

SP1 – Seeing someone else pursue their goals inspires me to pursue my goals

SP2 – I benefit when my personal goals align with the company goals

SP4 – I enjoy teams that share a sense of purpose

SP5 – I appreciate setting goals as a team

SP6 – My job has more meaning when my team's goals and mine align

SP7 – Having a group goal is more meaningful than a personal goal

E1 – I am more motivated to work on a project when a teammate is enthusiastic about the project

E3 – It is easier to become immersed in my work when I see my coworkers immersed in theirs

E4 – The culture of my company helps increase my enthusiasm for my job

E5 – I want to take on new tasks when I see my teammates do the same

E6 - Seeing my teammates passionate about their work makes me more passionate about mine

E7 – Others' inspiration on the job makes me feel more inspired with my work

E8 – Hearing my teammates express pride in their work makes me feel more prideful in mine

Factor 2: Contagion Acceptance

SP8 – I don't care if my teammates are pursuing the same team goal

SP9 – If my coworkers don't find meaning in their job, it doesn't bother me

SP10 – Seeing others set and achieve goals does not affect me

SP14 – If my teammates feel their jobs are meaningless, then I feel the same

Factor 3: Contagious Anxiety Sensitivity

C11 – I feel discouraged to express ideas when a teammate receives negative feedback for their ideas

C13 – When my manager or teammates watch me perform my job, I fear that I will make mistakes

E10 – If a teammate is in a negative mood, it will likely bring my mood down too

Coding Key

Demographics

D2   What is your current age?

D3   What is your ethnicity?

D4   What is your gender?

D5   How many years of work experience do you have all together on a part-time or full-time basis?

D6   How many hours do you work per week?

Morale as a Social Contagion Scale

C1   Being around confident people helps me feel more self-assured.

C2   If my team is confident, I feel more assured that we will complete our work.

C3   I feel more confident when my peers trust me.

C4   I feel more secure when my coworker tells me they believe in me.

C5   I feel more secure in myself when working in a group.

C6   Seeing teammates succeed makes me feel more self-assured.

C7   Seeing my teammates feel confident in their abilities to perform their jobs makes me feel more confident in my abilities to perform mine.

C8   Positive feedback from coworkers makes me feel more secure.

C9   Others' self-confidence in their jobs enhances my sense of self-confidence.

C10   If I feel my supervisor doesn't trust me, then I do not feel assured that I am performing my job well.

C11   I feel discouraged to express ideas when a teammate receives negative feedback for their ideas.

C12   When my teammates come to me for guidance, it makes me feel self-assured in my work abilities.

C13   When my manager or teammates watch me perform my job, I fear that I will make mistakes.

SP1   Seeing someone else pursue their goals inspires me to pursue my goals.

SP2   I benefit when my personal goals align with the company goals.

SP3   Others inspire me to make a difference in the company.

SP4   I enjoy teams that share a sense of purpose.

SP5   I appreciate setting goals as a team.

SP6   My job has more meaning when my team's goals and mine align.

SP7   Having a group goal is more meaningful than a personal goal.

SP8   I don't care if my teammates are pursuing the same team goal.

SP9   If my coworkers don't find meaning in their job it doesn't bother me.

SP10 Seeing others set and achieve goals does not affect me.

SP11   It's not important if my team and I have the same goals.

SP12   It doesn't affect me when my coworkers are not achieving our shared goals.

SP13   I don't care if my goals align with the company mission.

SP14   If my teammates feel their jobs are meaningless, then I feel the same.

E1   I am more motivated to work on a project when a teammates is enthusiastic about the project.

E2   My team seems more enthusiastic if at least one person in the team is.

E3   It is easier to become immersed in my work when I see my coworkers immersed in theirs.

E4   The culture of my company helps increase my enthusiasm for my job.

E5   I want to take on new tasks when I see my teammates do the same.

E6   Seeing my teammates passionate about their work makes me more passionate about mine.

E7   Others' inspiration on the job makes me feel more inspired with my work.

E8   Hearing my teammates express pride in their work makes me feel more prideful in mine.

E9   Seeing someone else being enthusiastic drains me.

E10   If a teammate is in a negative mood, it will likely bring my mood down too.

E11   My enthusiasm for my work depends on who I am assigned to work with.

E12   I dread performing my job if I know my teammates do not like their jobs as well.

E13   Others' enthusiasm about their jobs does not affect me.

E14   I do not care about how my teammates feel about their jobs.

Job Engagement Items

JE1   I am enthusiastic in my job.

JE2   I feel energetic at my job.

JE3   I am interested in my job.

JE4   I am proud of my job.

JE5   I feel positive about my job.

JE6   I am excited about my job.

Personal Self-Efficacy Beliefs Scale

PE1   I have confidence in my ability to do my job.

PE2   There are some tasks required by my job that I cannot do well.

PE3   When my performance is poor, it is due to my lack of ability.

PE4   I doubt my ability to do my job.

PE5   I have all the skills needed to perform my job very well.

PE6   Most people in my line of work can do this job better than I can.

PE7   I am an expert at my job.

PE8   My future in this job is limited because of my lack of skills.

PE9   I am very proud of my job skills and abilities.

PE10   I feel threatened when others watch me work.

Revised Social Connectedness Scale

SC1   I feel comfortable in the presence of strangers.

SC2   I am in tune with the world.

SC3   Even among my friends, there is no sense of brother/sisterhood.

SC4   I fit well in new situations.

SC5   I feel close to people.

SC6   I feel disconnected from the world around me.

SC7   Even around people I know, I don't feel that I really belong.

SC8   I see people as friendly and approachable.

SC9   I feel like an outsider.

SC10   I feel understood by the people I know.

SC11   I feel distant from people.

SC12   I am able to relate to my peers.

SC13   I have little sense of togetherness with my peers.

SC14   I find myself actively involved in people's lives.

SC15 I catch myself losing a sense of connectedness with society.

SC16 I am able to connect with other people.

SC17 I see myself as a loner.

SC18 I don't feel related to most people.

SC19 My friends feel like family.

SC20 I don't feel I participate with anyone or any group.

Job in General

JG1   Pleasant

JG2   Bad

JG3   Ideal

JG4   Waste of time

JG5   Good

JG6   Undesirable

JG7   Worthwhile

JG8   Worse than most

JG9   Acceptable

JG10 Superior

JG11 Better than most

JG12 Disagreeable

JG13 Makes me content

JG14 Inadequate

JG15 Excellent

JG16 Rotten

JG17 Enjoyable

JG18 Poor