Impact of prosocial and positive emotional languages of teacher on habits of students: Some quantitative empirical evidence

Anbu Savekar a, Shashikanta Tarai b, Moksha Singh c, Roopak Kumar d

NIT Raipur, Raipur, India

Abstract

Previous studies have shown that motivation and interpersonal communication between teacher and student contribute to the learning of language. Till date, there is no quantitative study to assess the impact of prosocial and positive emotional contents that influence English learning and modulate the habits of students. This paper examines the effect of prosocial and emotional languages on the habits, attitudes and behaviours of students. Nine habits that are proposed by Covey (2013) related to emotional, productive and proactive were evaluated using an assessment sheet. Comparative analysis of the response scores collected before and after the lectures were carried out (control group, N=14 and experimental group, N=14). Our results showed that prosocial and positive emotional words accelerated the language-learning environment and also brought a positive change in the behavioural habits of students of the experimental group. The reactive behaviours of the experimental group were controlled by using prosocial and positive words. Prosocial and positive emotional languages have a profound effect on the proactive behaviours of students that reinforce greater self-efficacy and facilitate the learning environment. We interpreted these results within the socio-cognitive theory of human behaviour, learning and language processing.

Keywords: Positive emotion; prosocial language; language learning; proactive; classroom

1. Introduction

Affective environment is significant in a classroom as emotions condition the learning (Green and Batool, 2017). Not only teachers but students also often comprehend and control the emotional content of lectures (Meirovich, 2012; Mercer et al., 2016). According to previous studies, belief, motivation, emotions, empathy, rapport and interpersonal communication facilitate teaching and learning (Araga˜o, 2011; Gläser-Zikuda et al., 2013; Barcelos, 2015; Barcelos & Araga˜o, 2018). Moreover, many studies have given preference to the socio-cultural dimension of learning as participation in which participation is considered as an ingredient of classroom interaction (Avila, 2019). Generally, emotionalised learning experiences enhance learners’ interactional skills, change the attitude and personal belief and improve knowledge and perception (Boyd & Pennebaker, 2015; King, 2016; Sauter, 2017). Although studies

1 Corresponding author.
E-mail address: starai.eng@nitrr.ac.in
exist on the role of emotions (Jennings & Greenberg, 2009; Méndez López & Aguilar, 2013; MacIntyre & Vincze, 2017) on teaching (Barcelos & Aragão, 2018; Hagenauer, et al., 2015; Henry & Thorson, 2018) and learning (Henry & Thorson, 2019), there is a little exploration on the potential impact of incorporating prosocial and positive emotional words to create an interpersonal and prosocial environment in the classroom. Till date, there is no quantitative study to assess the impact of prosocial and emotional language on the habits and behaviours of students, while learning English, as a second language. The planned use of prosocial language in teaching-learning of English, resulting in predominantly proactive classroom behaviour rather than a reactive one, remains to be empirically tested.

Our research on exploring prosocial and positive emotional language in the classroom may facilitate the efficacy of English language learning for non-native speakers. Prosocial words create a positive impact enhancing the efficacy of learning in the classroom (Kuykendall, 1993). Recent studies also validate the influence of prosocial language on public approval (Frimer et al., 2015). In the domain of cognitive neuroscience, the study by Tarai et al. (2019) revealed prosocial words facilitate the processing of language in the human brain. Does the deliberate and premeditated use of prosocial and emotional language positively influence the habits of learners in a classroom situation? To address this question and fill the research gap, the current study examines the prosocial and emotional language that may regulate the behavioural habits of students having to learn English. Effective habits are underlying behaviours which represent knowledge (what to do), skills (how to do) and desires (why to do) (Covey, 2013). According to the socio-cognitive theory of human behaviour and language processing, learning by imitation and alignment integrates learner with the social environment to receive support, cooperation and social relations (Atkinson, 2014; Atkinson et al., 2018). Does the interaction process of engaging positive emotions and deploying prosocial language create a learning environment that can modulate learners’ behavioural habits in a classroom context?

1.1. Literature Review

1.1.1. Emotion influences language teaching and learning

Alignment is a coordinated and deliberate interactive-strategy. The socio-affective approach is effective in developing inter-group and intra-group interactions (Atkinson et al., 2018). Behavioural changes occur when linguistic content, social orientations and affective interactions influence learners (Atkinson, 2014). Social environment enhances the likelihood of promoting the efficacy of learning. The current study anticipates the strategic deployment of prosocial contents and planned engagement of positive emotions in language teaching to facilitate learning.

Emotions enhance contextual adaptations and functional learning of language and culture in social domains (Sieberer-Nagler, 2016). Learning influenced by emotions changes the perception, evaluation, judgement, action and reaction to the stimulus (Frijda, 2016). Affective factors enhance attentional engagement and memory allotment to substantially influence learning (Green & Batool, 2017) while identifying and forming positive and negative reactions to a stimulus (MacIntyre & Vincze, 2017). Emotionalised learning experiences foster a positive attitude; encourage personal growth besides developing empathy, self-confidence and motivation (Jennings & Greenberg, 2009). Teachers’ positive emotions enhance learning; generate an interactive social network and resilience towards coping with stress (Mendez López & Aguilar, 2013; Zinsser et al., 2016). However, negative emotions and lack of social support experienced by students create learning anxiety and obstruct adaptive learning (Jin & Dewaele, 2018). The teachers’ socio-emotional well-being and skills affect learners’ emotional well-being (Mercer et al., 2016). Positive psychology addresses several issues related to stress, strain and challenges faced by language teachers (MacIntyre & Mercer, 2014). This paradigm cultivates well-being in the minds of teachers and learners (Oxford, 2015). Emotions stimulate thinking (Rodrigo-Ruiz, 2016).
and may effectively facilitate language teaching and learning (Constantinou et al., 2014). Teachers often manage and control the emotional reactions of students (Jennings & Greenberg, 2009) and also influence students’ habits and behaviours. For example, teachers dilute the effect of negative emotions of learners by creating effective interpersonal relations (Mendez López & Aguilar, 2013).

Interpersonal communication helps the teacher to execute tasks and activities in the given time frame of the curriculum. Goetz et al. (2013) affirm that characteristics of teaching practice and supportive presentation style directly relate to students’ understanding, enthusiasm, attention, enjoyment and pride. Both teaching method and style effectively minimise anxiety, anger, boredom and helplessness among students (Green & Batool, 2017). Furthermore, even students’ negative emotions are most likely to induce frustration, anger and irritation in the teacher (King, 2016). Both positive and negative emotions influence teacher’s classroom practices, learning activities and outcomes (Baudoin & Galand, 2017).

An emotional being is largely considered to be irrational, childish, out of control and destructive as opposed to an emotional being as civilised, thoughtful and adult (Sutton & Wheatley, 2003). Cognition and emotions are two distinctly opposite forces and therefore researchers are focusing on emotions affecting cognition in the classroom. Neurocognitive and behavioural studies suggest that prosocial and positive emotional words process language with lesser cognitive and neural resources (Tarai et al., 2019). Schumann’s (1997) neurobiological perspective of language learning supports psychological constructs such as notions of value, emotional memory and stimulus appraisal. Neurobiological mechanisms of affective stimulus appraisal sustain language learning by forming a supportive relationship between the learner and trainer (Schumann, 1997). According to Schumann (2001), learning about information, knowledge and skills is behaviour much like innate foraging skills. Zinsser et al., (2016) maintain early socialization process influences the efficacy of socio-emotional learning wherein teacher’s emotions, self-regulation and expressions are instrumental in creating a positive environment and self-esteem.

1.1.2. Positive language influences learning

Positive emotions create social connections, greater resilience and resourcefulness for language learning and communication (MacIntyre & Vincze, 2017). Under the framework of positive psychology and language learning, positive frame of mind nurtures and creates a state of positive emotion, engagement, relationship and accomplishments (Seligman, 2011). Functional use of language facilitates teaching and learning (Ellis, 2019). Teachers influence students not merely by “how” and “what” they teach, but specifically by “how they relate to the learners” (Jennings & Greenberg, 2009). Teachers reframe, rephrase and restate the negative verbal contents in non-responsive and non-productive classes (Aknin et al., 2018). Consequently, an effective teaching strategy may amplify prosocial and positive emotional quotient to ensure behavioural change.

Positive linguistic interaction can be consciously used by teachers to empower students and reinforce empathy, support, respect, dignity and trust. For example, the inclusive (we) and exclusive (you) pronouns as linguistic tools (Pennebaker, 2017), provide insights into the teacher-student relationship and subtly contribute to engaging or disengaging with learners. The pronoun ‘we’ may bring inclusive power to both teacher and students in a classroom. Language can influence and shape others’ thinking. Use of content or lexical words (adverbs, nouns, adjectives and regular verbs) and function or grammatical words (articles: an, a, the; pronouns: you, I, we, them; negations: no, not, never; conjunctions: and, or, since; auxiliary verbs: is, have, was; adverbs: so, really, very; and prepositions: to, for, of) in communication is significant. Function words primarily enhance social, interpersonal skills and connect speaker and listener (Kuykendall, 1993; Pennebaker, 2017).
1.1.3. Prosocial language and behaviour enhance learning

Teachers’ empathy, positive rapport and interpersonal communication foster positive learning environment (Hagenauer et al., 2015). A teacher is capable of developing and maintaining a strong interpersonal relationship with the learner. Teacher’s emotional (EI) and social intelligence (SI) develop socio-emotional skills among students and also enhance teacher-student relationship (Cain and Carnellor, 2008; Garner, 2010; Jin & Dewaele, 2018). The essential combination of EI and SI for teaching and learning of language is reflected either by verbal or non-verbal communication (Pennebaker, 2017; Sauter, 2017; Gholamrezae & Ghanizadeh, 2018). Emotional and social signatures of teachers generate empathy and motivation for learning (Henry & Thorsen, 2019).

Prosocial language containing prosocial words imply warm, loving-kindness, cooperation, empathy, prosocial intent of help and social support (Frimer et al., 2015; Tarai et al., 2019). Positive emotions influence prosocial actions leading to prosocial behaviour (Aknin et al., 2018). Prosocial language is processed faster than negative or unsocial language (Kuykendall 1993; Tarai et al., 2019). Prosocial behaviour is an altruistic behaviour not involving monetary gains, yet benefiting the society, such as saving the environment, charity, donation and helping people (Padilla-Walker & Carlo, 2015) characterised by kindness, generosity, caring and helping behaviour (Kuykendall, 1993). The past study established prosocial language and behaviour have a huge impact in garnering support, attracting the crowd and mobilising positive decisions in crowdfunding and public address-speech (Decter-Frain & Frimer, 2016). Furthermore, people listening to music infused with prosocial lyrics, exhibit empathy, prosocial thoughts and prosocial behaviour, as opposed to listening to neutral music (Greitemeyer, 2009a, 2009b; Ruth, 2018).

1.2. Research Question and Hypothesis

Language influences emotional and social learning (MacIntyre & Vincze 2017). Learning changes behaviour and social reinforcement by establishing or retaining positive behaviour (Sieberer-Nagler, 2016). Our study further explores the immense potential of enhancing learning through prosocial language and positive emotions in a classroom.

Prosocial language is instrumental in nurturing positive attitude, feeling of empathy, support; help (Greitemeyer, 2009a, 2009b; Decter-Frain & Frimer, 2016; Tarai et al., 2019). Frimer et al., (2015) confirm the direct impact of prosocial language in the debates of the US Congress on public approval and support. Kuykendall (1993) proposes deliberate and conscious use of courteous language to enhance prosocial skills in a classroom situation. These studies provide the first premise for our study: to test how empowering is the language of prosocial and positive-emotion in modulating the habits and behaviours of learners in a classroom. Furthermore, as an empowering linguistic tool emotion influences thinking and create an interpersonal connection between speaker and listener (Boyd & Pennebaker, 2015). Emotions play a crucial role in motivating the language learners (Méndez López & Aguilar, 2013; King, 2016; Teimouri, 2017; Goetz et al., 2013; Baudoin & Galand, 2017). Boyd and Pennebaker’s (2015) study present the second premise: to test the role of positive emotional language that may ascertain positive orientation in the habits and behaviours of language learners. The current study aims to test the following hypothesis, by employing prosocial and positive emotional language in teaching and learning of English in a classroom situation.

Hypothesis 1

Prosocial language of teacher may enhance the understanding level of learners while engaging them in a true sense of communication for relationship building.
Hypothesis 2
Learners of English may attune better to the emotions and needs of others after attending English class with prosocial language, resulting in greater inclination towards kindness, honour, commitment and consideration.

These hypotheses were tested by applying the quantitative approach and statistical methods to the assessment-based response data collected from students before and after the lecture.

2. Method

2.1. Participants

Considering the objectives, the nature and characteristics of response data the current study intends to obtain, purposive sampling technique was used to select the participants for the study. This sampling technique is usually used when the researcher has a specific purpose to test a hypothesis while giving his/her value judgments in the selection of students who are considered representative of the population. All participants were students (N=30, F=10, Mean Age= 18.43), studying Bachelor of Engineering (B. Tech) in Chhattisgarh, India and attending the first-year professional English communication course. They studied English as a subject during the senior secondary level. All the students belonged to either rural or semi-urban background. They were imbalanced bi-multilingual speakers with more exposure to Hindi (their mother tongue). Students voluntarily gave their written consent to participate in the study. Care was taken to protect students’ personal demographic information.

2.2. Inclusion criteria of sample

Out of total 30 students, two male students were excluded from the study due to their inability to attend classes. This exclusion criterion was followed to collect data of those students who intended to attend the lecture and performed the activities. This drew sample strength of only 28 students for the current study.

2.3. Experimental and control groups

Twenty-eight selected students were equally divided into two: experimental (N=14, F=5, Mean Age=18.22) and control (N=14, F=5, Mean Age=18.64) groups. In the experimental group, out of 14 students, 3 students previously studied English both as subject and medium of instruction and the remaining 11 students studied English with Hindi as a medium of instruction. Similarly, out of 14 in the control group, 4 students studied English as a subject and medium of instruction, and the remaining 10 were from Hindi medium. Overall, students learned English as a second language.

2.4. Classroom settings, materials and tools

The size of the classroom for both groups was fairly large with a green chalkboard, a platform and podium for the teacher to teach, providing an added height for clear visibility of the class. Students were seated comfortably on benches close to the teacher’s podium. In the same classroom-settings, two teachers were assigned the task to deliver a lecture at two different times. One teacher delivered the pre-designed lecture to the experimental-group students with prosocial and positive words whereas other teacher delivered a lecture to control-group students without prosocial and positive words.
2.5. Lecture for experimental and control groups

The subject content of the lecture for both groups attending class was the same. The lecture content was an introduction to English learning to enhance speaking skills. However, the representation of the content was purposefully varied based on the presence and absence of prosocial and positive emotional words for the experimental and the control groups respectively. Moreover, delivering lectures and activity instructions to the students varied distinctly regarding the language employed by two teachers for two groups. The teacher of the experimental group used pre-designed prosocial and positive words from the list given by Frimer et al. (2015). We selected those prosocial and positive emotional words (Appendix A), which were appropriate and suitable according to the content of the lecture. This was done to achieve the emotional associations between teacher and students of the experimental group. Contrarily, the teacher of the control group used the regular and routine language without prosocial words. The objective of retaining the regular language to deliver lectures to the control group was to maintain a ‘no subjective connection’ with the students. Both the teachers of control and experimental groups consciously delivered the lectures and instructions formally to maintain the intended environment of the classroom. Both teachers delivered five lecture each, for 45-60 minutes for each lecture. A single questionnaire was given to students to record the response of students related to the behavioural habits of both groups. Also, the procedures for collecting the students’ responses before and after the class were the same for both groups of students.

2.6. Consent form and assessment sheet

2.6.1. Demographic details of students

Students were asked to fill their demographic details such as name, age, gender, education, mono-bimultilingual competency and their medium of education at the senior secondary level. The questionnaire along with a consent statement was given to all students to fill before the lecture.

2.6.2. Assessment sheet to measure behavioural habits

An assessment sheet was designed using a seven-point Likert scale (1 being very poor and 7 being outstanding) to collect the self-response of student’s behavioural habits before (pre-assessment) and after the lecture (post-assessment). The sheet was prepared following Covey’s (2013) two basic habits (i.e., emotional bank account and productive balance; Table 1) and seven habits of highly effective people (i.e., Be proactive, Begin with the end in mind, Put first thing first, Think win-win, First understand then be understood, Synergize and Sharpen the saw).

<table>
<thead>
<tr>
<th>Basic habits</th>
<th>The modified version of habits adopted in this study</th>
<th>Meaning of the habits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional bank account</td>
<td>Emotions-resulting in prosocial behaviour: Prosocial self</td>
<td>Deposits of positive emotions aroused in self or others (self-worth, trust, empathy, understanding, cooperation)</td>
</tr>
<tr>
<td>Productive balance</td>
<td>Hard-Work</td>
<td>Production or effort invested in the task with its accomplishment</td>
</tr>
</tbody>
</table>

2.6.3. Transposing Covey’s 7 habits to the research

The current study adapted all of the following 9 habits of Covey (2013) to collect response data from the students:

a. Emotional bank account: To show kindness and consideration towards others emotion.
b. Productive balance: To maintain an appropriate balance between work and family.

c. Be proactive: To control my life and take responsibility.

d. Begin with the end in mind: To have a desire and goal of life for an accomplishment.

e. Put first things first: To have a clear plan for achieving the overall goal of life.

f. Think win-win as Solution: To cooperate with others for solving conflicts that benefit all.

g. First understand then understood: To understand the feelings and viewpoints of others.

h. Synergize: To search for new and better ideas and solutions for the problems.

i. Sharpen the saw: To find the meaning and enjoyment in life.

Furthermore, the current study modified the heading of these habits by replacing the long-phrase (i.e., emotional bank account, productive balance, be proactive, etc.) with a single simple-word (emotion, hard work, proactive etc.). The replacement procedures were followed to get the quick assessments and understanding of meaning from the students’ habits before and after the lecture. The details of a modified version of the 9 habits’ heading (Covey, 2013), that we adapted for collecting the response from students, are given in the tables (Table 2). As per the objectives of the current study, students assessed their habits before and after the lecture by observing each statement and using their best judgement.

Table 2. Effective habits considered for collecting the response from students (Covey, 2013)

<table>
<thead>
<tr>
<th>Habit 1: Be Proactive</th>
<th>Habit 2: Begin with the End in Mind</th>
<th>Habit 3: Put First Things First</th>
<th>Habit 4: Think Win-Win</th>
<th>Habit 5: Seek First to Understand, Then to Be Understood</th>
<th>Habit 6: Synergize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal -Self</td>
<td>Personal -Self</td>
<td>Personal -Self</td>
<td>Social-Self:</td>
<td>Social-Self:</td>
<td>Social-Self:</td>
</tr>
<tr>
<td>Proactive - (Responsibility/ Initiative).</td>
<td>Clarity (Vision / Values)</td>
<td>Planning (Integrity / Execution)</td>
<td>Solution (Mutual Respect/ Benefit)</td>
<td>Understanding (Mutual Understanding)</td>
<td>Creativity (Creative Cooperation)</td>
</tr>
<tr>
<td>Leading to personal growth, taking responsibility for self, using knowledge of self for improvement and being self -motivated and self-reliant.</td>
<td>The ability to foresee, think and plan with the end in mind.</td>
<td>The ability to prioritise and plan prior to execution.</td>
<td>A win-win situation. Arriving at a solution which correlates to the altruistic aspect of proactive interpersonal connect rather than being competitive.</td>
<td>Building a connection using listening skills in order to be empathetic towards others.</td>
<td>Synergising as a team, connecting, creative cooperation, open-mindedness, being receptive and solution-oriented. Creativity and</td>
</tr>
</tbody>
</table>
enjoyment are interlinked in the learning process. Enjoyment is associated with enthusiasm, self-growth, well-being, self-efficacy in handling challenges, being productive, and accomplishing goals.

<table>
<thead>
<tr>
<th>Habit 7: Sharpen the Saw</th>
<th>Effective self: Personal and Social-Self</th>
<th>Enjoyment (Renewal of Self)</th>
<th></th>
</tr>
</thead>
</table>

2.7. Task for data collection

All the students irrespective of study groups were briefed in a short introductory session, as to how the class lecture would facilitate overcoming their fear and anxiety of spoken English. They were not illustrated about the pre-designed and pre-mediated class-lecture with and without prosocial and positive language, to collect their natural, unbiased self-response for analysis and comparison. Before the first lecture, students of both control and experimental groups were asked to fill the consent sheet once. They also had to read the statements carefully under each habit and circle the number that indicated how they felt and performed in each habit using a seven-point Likert Scale (1 being very poor and 7 being outstanding) before the (first) lecture and after the last (fifth) lecture. They were also asked to fill up an assessment sheet before and subsequently after each lecture. During the entire lecture, students were instructed to observe the content of the lecture mindfully. After the lecture, they were asked to rate the same assessment sheet, as they had done before the lecture. The main objective of having this self-rating assessment, which was done using a 7-point Likert scale, was to analyse the impact of prosocial and positive language on behavioural habits and emotional well-being of the students. The entire class activities including teachers’ lecture and students’ response both for control and experimental groups were recorded using audio-visual devices (audio-video camera).

2.8. Data analysis procedures

The recorded raw-data were stored on a laptop for the transcription and analysis of the prosocial and positive language used by the teacher of the experimental group. Similarly, the lecture with natural neutral language which was delivered by the teacher of the control group was also recorded for analysis. Further, the self-rating assessment-scores of students of experimental and control groups were separately tabulated in an excel-sheet to arrive at the consolidated data for each of the study groups. The numerical data that was collected from each student using a seven-point Likert scale of both groups under the column of each habit was converted to average values. The average values of each student were calculated and orderly presented across variables for repeated measures ANOVAs. A series of repeated ANOVAs using within-subject factors of habits, groups and assessments (α=.05) were computed and only significant effects were reported for interpreting the results.

3. Results

Employing a three-way ANOVA on the score with 7 habits (proactive, hard-work, clarity, planning, solution, understanding, creativity, and enjoyment), 2 groups (experimental, control) and 2 assessments (pre-test, post-test), our study showed a significant main-effect of habits, F(1, 13) = 4.247, p = .03, ηp² = .761. The score was higher for the habit of enjoyment, understanding, creativity and solution than proactive, clarity and planning (Fig. 1 a). This implies that the students’ exhibited an improvement in their relationship with others. They were able to understand better others’ viewpoint by developing creative ideas and solutions that benefited others. In addition, our analysis also revealed a significant
main effect of 2 assessments, $F(1, 13) = 4.356, p = .05, \eta^2 = .251$, suggesting higher score for post-test (after lecture) than pre-test (before lecture) (Fig. 1 b). There was also a two-way significant interaction between 7 habits (proactive, hard-work, clarity, planning, solution, understanding, creativity, and enjoyment) $\times$ 2 assessments (pre-test, post-test), $F(1, 13) = 3.748, p = .045, \eta^2 = .738$, signifying higher assessment score for post-test than pre-test only in the case of clarity and enjoyment. Post-hoc analysis using Tukey procedures showed that the assessment scores were significantly increased after the lecture for the habit clarity, $t(14) = 6.569, p = .018$, and enjoyment, $t(14) = 5.749, p = .047$ (Fig. 2). After attending the mindful-lecture with prosocial and positive language, students were not only capable of better planning, organizing and preparing what they desired to accomplish, but also able to cooperate with others for solving conflicts that benefit others. Rest of the main effects related to experimental and control groups ($p > .597$) and a three-way interaction ($p > .294$) were not significant.

A three-way ANOVA on the score of students with 2 habits (proactive, understanding) $\times$ 2 groups (experimental, control) $\times$ 2 assessments (pre-test, post-test) showed a robust main-effect of habits, $F(1, 13) = 11.250, p = .005, \eta^2 = .464$, providing higher score for understanding than proactive (Fig. 1c). This analysis also defined a two-way significant interaction between 2 habits (proactive, understanding) $\times$ 2 groups (experimental, control), $F(1, 13) = 4.412, p = .056, \eta^2 = .253$, confirming higher assessment scores for the habit of understanding than proactive both experimental and control groups (Fig. 1 d). This indicated that students' understanding skills had increased which would help them to respond and also see the things from others point of view. Post-hoc comparisons confirmed the highest score for understanding than proactive for experimental group, $t(14) = 13.154, p = .00001$, and control group, $t(14) = 6.153, p = .003$. As per the mean differences, the control group showed higher score than experimental group only for proactive, $t(14) = 6.153, p = .003$, but not for understanding ($p > .637$). No significant differences were found in relation to the main effect of groups (experimental, control), ($p > .537$) and assessments (pre-, post-test), ($p > .949$), nor due to interaction between these two factors ($p > .143$). Even the interaction of three factors: habits (proactive, understanding), groups (experimental, control) and assessments (pre-test, post-test) did reach to significant ($p > .867$).

![Figure 1](image_url)  
**Figure 1.** Impact of Teacher’s positive and prosocial language on habits of students  
(a): Mean response score of students for enjoyment, understanding, creativity, solution, planning, clarity and proactive habits;  
(b) before (pre-test) and after (post-test) the class-lecture;  
(c) understanding and proactive habits;  
(d) experimental and control groups for understanding and proactive habits and behaviours;  
(e) behavioural habits of solution and understanding before and after the lecture;  
(f) basic habits of emotion and hard-work before and after the class-lecture;  
(g) emotional and hard-work behaviours before (pre-test) and after (post-test) the class-lecture in control and experimental group.
Further, the mean scores of 2 habits (solution, understanding) \times 2 groups (experimental, control) \times 2 assessments (pre-test, post-test) were submitted for a three-way ANOVA, which did not reveal any significant main effect, or three-way interactions (p > .621). However, only two-way factors between habits (solution, understanding) and assessments (pre-test, post-test) showed a significant interaction, F(1, 13) = 5.284, p = .039, \eta^2 = .289, following the highest mean score for the habit of understanding after the class-lecture (Fig.1c). Post hoc analysis showed a significant contrast between before and after the class related to ‘understanding’, t (14) = 8.153, p > .0039, but not related to ‘solution’ (p > 1.00). Comparatively, the post-test score of the understanding is significantly higher than the post-test score of the solution, (t (14) =7.299, p > 0.0092).

As predicted, a three-way ANOVA on the mean score of 2 basic habits (emotion, hard-work) \times 2 groups (experimental, control) \times 2 assessments (pre-test, post-test) revealed a significant interaction effect, F(1, 13) = 11.489, p =.005, \eta^2 = .469, suggesting higher mean score for emotion than hard-work only in the case of experimental group after the lecture (Fig. 1 g). Post-hoc analysis using Tukey procedures confirmed the significant differences between post-test scores of experimental and control groups, t (14) =7.978, p > 0.001, which was higher for emotion than hard-work. However, the mean score was significantly higher for the ‘hard-work’ before the lecture (pre-test) for experimental group, t (14) =16.619, p > 0.00001, and before, t (14) =7.978, p > 0.001 and after (post-test), t (14) =5.983, p > 0.01, for control group. This means that students of the control group were certain to do hard-work for helping others, but they were not emotionally attached to others. Therefore, the pre- and post-test scores of control group including the pre-test of experimental groups, in which students had no exposure to prosocial and positive languages, showed a higher rate of scoring of hard-work than emotions. Besides, a two-way interaction between habits (emotion, hard-work) and assessments (pre-test, post-test) was significant, (1, 13) = 5.765, p =.032, \eta^2 = .307, yielding higher score for the emotion than hard-work only after the class-lecture, but not before the class-lecture (Fig. 1 f). Post-hoc comparisons confirmed significant differences between the scores of pre-test and post-test for only emotion, t (14) =8.804, p > 0.0001, but not for hard-work (p >.801). However, the mean-score comparison between hard-work and emotion showed a higher score for hard-work than emotion, t (14) =7.403, p > 0.0008 before the class-lecture.

Figure 2. Teacher modulates seven habits of students. The mean response score of students for 7 habits before (pre-test) and after (post-test) the class lecture.
4. Discussion

The effect of prosocial and positive words was examined to understand the modulation of learner’s habits and conducive behaviour towards learning English. Our results established the significance of prosocial language in transforming the emotional state, developing empathy, enhancing cooperation and well-being in the classroom. The lecture content with pre-planned usage of prosocial and positive words enhances the students’ habits (understanding, enjoyment, creativity, solution, clarity, proactiveness and planning). The finding verifies positive emotion enhance due to positive affective priming (Kühne et al., 2011) and cognitive appraisal (Sutton and Wheatley, 2003). Further, the experimental group displayed a higher score for understanding and enjoyment of the lecture than for pro-activeness and solutions thereby correlating prosocial words with students’ perceptiveness, thoughtfulness and open-mind towards learning. Emotionalised learning system can develop the characteristics of prosocial-self, regulate emotions, and enhance empathy, positive behavioural habits (kindness, honour, commitment and consideration) in learners. In a nutshell, the current study positively suggests prosocial language content of planned lectures may improve knowledge, skill and desires of students inducing better emotional, functional and social outcomes.

Analysing the behavioural habits, current study submits positive emotions influence the learners’ habits in the classroom. Post-lecture, learners are likely to be proactive, taking responsibility and initiative while interacting with teachers. This viewpoint is supported by a widely used theoretical framework of positive psychology, in the context of language teaching and learning (Seligman, 2011). According to this school of psychology, positive emotions generate the willingness of students to participate in classroom discussions (Oxford, 2015). Bar-On (2010) confirms the heightened interpersonal relationship (between learners and teachers) due to the application of positive psychology and affective science, which in effect closely aligns with emotional intelligence propounded by Covey (2013). Most of these findings directly correlate with those of Buckmaster (1994), who applied the framework of Covey’s (2013) habits to school-going primary children and found incorporating positive activities reduced excessive competitiveness and promoted congenial atmosphere. Similarly, current study corroborates pre-designed lecture with emotional and prosocial words, produce positive outcome in the physical, emotional, mental and spiritual aspects of learners’ habits.

4.1. Positive emotions and prosocial language modulate habits and behaviours

Positive emotions modulate thoughts, attitudes and behaviours of the students and generate a positive outcome. Earlier studies found similar kind of changes in the domain of positive psychology (Mercer et al., 2016) and socio-affective influence (Atkinson, 2014, Atkinson et al., 2018). Our study also found behavioural changes in learners. The results exhibited an increased response in the students to creativity, solution, understanding and enjoyment after the lecture. A greater level of enjoyment was observable, specifically in performing an activity, in the presence of peers and teachers (Dewaele et al., 2018; Dewaele and Alfawzan, 2018; Dewey et al., 2018). Such a performance triggers the interactional instinct which influences the learner and encourages a proactive approach towards all positive stimuli (Baudoin and Galand, 2017; Dewaele, 2011). Thus, the learner continues to respond proactively, perform willingly and enthusiastically even in the context of language learning. Our findings are supported by previous studies which state that effective learning is largely an affective learning experience in the classroom.

Our findings also validate the study on cognition and emotion interaction (Oxford, 2015) to affirm the significance of positive emotions in language learning. The prosocial words and positive emotions influence affect-based learning. Our results are in alignment with Schumann’s neurobiological perspective that highlights the psychological constructs leading to affective stimulus appraisal in learning (Schumann, 1997; Tarai et al., 2019). Furthermore, these results also validate Zinsser et al.,
4.2. Prosocial language moulds emotional efficacy and proactiveness

The level of understanding significantly increased when the students were exposed to prosocial language-based lecture. This indicates that prosocial language induces the behavioural changes in the mind of students. Further, the affective (emotion) appraisal embedded at the core of cognition prompts learning. Our study suggests that the experimental group develop better emotional, social skills and prosocial behaviours (Aknin et al., 2018) enabling them to respond and see the things from others point of view (Buckmaster, 1994). Conversely, the control group shows higher scores for proactive (self-awareness) as compared to understanding (social skills). Since the lecture contents for the control group is devoid of prosocial and emotional words, it does not produce similar levels of development of social skills. Therefore, the control group does display a lesser extent of social skill and helpfulness. Through cooperation between students and their social ability (to be proactively prosocial) depends on the teachers’ instructional approach, cooperative learning takes place only when the students perceive the cooperative approach to be beneficial for them in classroom learning (Premo et al., 2018). The interpersonal connection between the teacher and learner is explained by the cognitive appraisal theory (Jin and Dewaele, 2018). Affective priming created by positive and prosocial verbal as well as non-verbal language leads to better interpersonal connection, fosters positive feeling and establishes a supportive environment (Kühne et al., 2011). Teacher’s positive responses reproduced from the current study are as follows:

“Teacher – Yes, that was a good answer.
Teacher – Yes, very good.
Teacher – First talk about your strengths child, then talk about your weakness
    Sapna, Speak slowly, take your time, yes, continue speaking.
Teacher – That was quick. Why don’t you elaborate on what is your strength and explain a little, also say why it is your strength?”

The results of the current study also support the findings of previous studies on prosocial language influence on public opinion in favour of political parties (Frimer et al., 2015; Decter-Frain and Frimer, 2016). Enhanced prosocial behavioural attitudes of the experimental group are apparent due to cognitive stimulus appraisal and affective priming. In this regard, Jin and Dewaele (2018) reiterate the significance of positive orientation in lowering anxiety, enhancing self-image, creating positive social relationships, empathy, increased interaction, intimacy and finding solutions. The cognitive activation and supportive environment induced by the teacher’s prosocial language enhances well-being, readiness and eagerness to learn. The experimental group’s enhanced social behaviour is also the outcome of prosocial language creating positive emotional valence (Rintell, 1984; Pennebaker, 2017; xxx). Further, the teacher’s verbal and non-verbal means of communication with vocalic emotions (of love, compassion, gratitude, and admiration) are effective in creating positive behaviours and connecting students and teachers (Sauter, 2017; Kwitonda, 2017). Dewaele (2011) affirmed that regular practice and authentic communication (such as role-plays and subjective experiences) are effective in learning to communicate emotions. The present study, therefore, gives importance to language inputs and activities of the teacher by considering the extempore topics focusing on students’ experiences: My Idol; My first day at college; Most memorable experience of my life; Favourite food; A thank-you speech; An apology and an interactive conversation between two students- “Getting to know the Stranger”. Moreover, the experimental group teacher’s language inputs that change the behavioural habits of the students are cited below:
“Teacher – Shahid, very good. You have improved compared to the last performance. Have you all (to the students) noticed? And the best part is he has started speaking English. He was nervous, yet he performed, did not give up.

Let us all clap for him.

Shahid, you have understood the technique, now you have to continue it to improve your speaking skill.”

Even the mindful action of the teacher influences the proactive behaviour of students (improves the focus, responsibility, willingness), in addition to reducing fear and anxiety of students (Illés and Akcan, 2017). This interpretation is supported by the post-lecture outcome of the experimental group, who received emotionalised learning experiences.

An emotionally safe-learning environment promotes linguistic contagion in the classroom as the teacher engages the students’ interest, fuels enthusiasm and enjoyment (Dewaele et al., 2018). When the teacher facilitates enjoyment by replacing the emotionally uninteresting learning routine with interesting challenges, students often share their emotional expressions and subjective experiences relating to the curriculum. Emotional competence emerging from the teachers’ emotional intelligence or personality trait is conducive to student development (Rodrigo-Ruiz, 2016). In this direction, the present study suggests premeditated and mindful lecture content generates greater understanding between the teacher and student. This enhanced interpersonal relationship increases trust and reinforces empathy towards others (Kuykendall, 1993).

Language influences thoughts, feelings and behaviours. This immense potential of harnessing the power of words has strong evidence in the domain of politics (Frimer et al., 2015; Decter-Frain and Frimer, 2016; Pennebaker, 2017). Prosocial language is a powerful stimulus and the current findings reflect changes induced by specific and deliberate words of the teacher. For example, the inclusive pronouns (‘we, us, our’) create and promote interpersonal relationship, prosocial generate empathy, trust, encourage and social appreciation attitude. The teacher’s prosocial behaviour and personal attitude (Boyd and Pennebaker, 2015), majorly presented through inclusive pronouns, significantly project empathy, generate positive emotional arousal and reinforce the prosocial behaviour of the students (Aknin et al., 2018). These are illustrated in the following teaching instructions:

“Teacher – Why do we talk to someone?
Yes, we express our thoughts. Good! What else do we say?
Teacher – Yes, correct we discuss matters. Let us list out- we discuss thoughts, we share information, we share ideas, we share thoughts and something more …. facts and feelings. What one person shares with another person is communication.
Where do we use verbal communication?
Teacher- Yes excellent. We use verbal communication in writing and speaking. Speaking is oral communication.”

The teacher’s clarity of instructions, enthusiasm, encouragement, care and concern towards learning, produces a warm appreciative atmosphere. Moors and Houwer (2001) established that words with positive motivational valence facilitate an approach while the negative motivational valence stimuli generate withdrawal response. Rossiter’s (2003) study on employing affective strategies beneficial to learning in the Canadian classroom context, showed no significant increase in the performance and self-efficacy, due to the pre-existing positive affective threshold of the groups studied. It is worthwhile to say that language of teacher does not only facilitate a positive, friendly, supportive, warm, connecting and relaxed environment for learning but also encourages prosocial behaviour to generate proactive interpersonal connect, converging with the socio-cognitive value-based and affective approach towards learning (Schumann, 1997). To sum up, the current study has established that learners of English, within an environment of consistent prosocial and positive emotional language, develop better emotional and
understanding levels, transform into more empathetic, kind, committed individuals with prosocial behaviour.

5. Conclusions

The current findings broaden our understanding of the impact of prosocial and positive emotional words in the learning of English as a second language. Applying the theoretical framework of positive psychology, our results identify the influence of teacher’s positive emotional and prosocial language content on English teaching. This study incorporated the seven habits that Covey had worked upon, to substantiate the effect of positive psychology not only in influencing the learning but also in the changes catalysed in the students by the prosocial language used during lectures by the teacher.

It was found that the habits, behaviours, and the efficacy of language learning were heightened due to the use of prosocial language in the classroom. The communicative language and prosocial strategy of the teacher enhance the self-efficacy, social-emotional growth and language learning of the students. The implication of “how” to communicate is equally important as “what” to communicate, since it has the power to influence emotions, thinking, habit and behaviour of students. Prosocial language is significant as it generates self-efficacy and influences learning. The strategic and mindful use of language can further be explored to observe the enhancement and improvement of teamwork, leadership, mental health and mentoring ability of students in a classroom context.

6. Ethics Committee Approval

The author(s) confirm(s) that the study does not need ethics committee approval according to the research integrity rules in their country (Date of Confirmation: August 05, 2020).

References


Appendix A.

The dictionary items of prosocial words (Frimer et al. 2015) that are selectively used for designing the lecture are as follows.

accepting, acceptance, accommodation, accommodate, accomplished, affecting, affection, agreeable, agreement, aid, altruistic, altruisms, appreciation, appreciate, approachable, assistance, benefaction, benefit, beneficial, benevolence, benevolent, biodiversity, bio-ethical, capable, caretaker, care, caring, charity, charitable, collectively, collective, communication, communicate, compassion, compassionate, complimentary, concern, concentrate, confidence, confident, consciences, consensus, conservation, considerate, considering, contribution, contributing, cooperating, cooperation, cope, coping, courteous, courtesy, defending, defended, dependable, dependent, dignity, donation, donate, earth, ecology, ecological, education, educate, egalitarian, empathy, empowerment, encouragement, environmental, environmentalists, equal, equality, ethical, ethics, everybody, everyone, facilitation, facilitate, fair, fairness, forgive, forgiveness, free, freedom, generosity, generous, gentle, genuine, genuineness, genus, give, giver, good, goodhearted, great, greater good, guard, harmony, harmonious, help, helping, helpful, honest, honesty, honour, honourable, hospital, hospitality, human, humanitarian, humanism, impartial, impartiality, inspire, inspiring, integrate, integrity, integration, interaction, interact, interactive, invite, invited, involved, involving, involvement, justice, judge, kids, kind, kind-hearted, kindness, listen, listener, listening, loyal, loyalty, moral, morality, Non-governmental organisation, nice, nicely, non-profit, nurture, peace, peaceful, philanthropic, philanthropists, praise, praiseworthy, pre-judge, protection, protect, reciprocate, reciprocal, reliable, reliability, relief, rely, respect, respectful, responsible, responsibility, responsive, righteous, rights, rightful, role model, selfless, sensitive, sensitivity, sensible, service, share, shared, shield, sincere, sincerity, society, social, sociable, solidarity, support, supporter, sustainable, sustain, sympathy, sympathetic, taught, teacher teach, team, team leader, tender, tenderly, people, therapy, therapeutic, thoughtful, tolerance, tolerate, trust, trustworthy, tutor, tutorial, understand, understandable, universal, universalism, unprejudiced, upright, virtue, virtuous, voluntary and volunteers.

Öğretmenin toplum yanlışı ve pozitif duygusal dillerinin öğrencilere alışkanlıklarına etkisi: Bazı nicel deneySEL kanıTLAR

Öz


Anahtar Sözcükler: pozitif duygul; toplum yanlışı; dil; öğrenmek; proaktif; smf
AUTHOR BIODATA

Anbu Savekar, National Institute of Technology Raipur, India
Shashikanta Tarai, National Institute of Technology Raipur, India
Moksha Singh, National Institute of Technology Raipur, India
Roopak Raag, National Institute of Technology Raipur, India