

The Impact of Self-Determination on Pro-Social Tendencies

Zoya Farooq Bhamani Ali
zoya.bhamani@iqra.edu.pk
Iqra University

Dr Zaki Rashidi
zaki@iqra.edu.pk
Dean, IUBS Organization, Iqra University

Corresponding Author: * Zoya Farooq Bhamani Ali zoya.bhamani@iqra.edu.pk

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ABSTRACT

Self-determination is one of the fundamental psychological constructs that determine emotional regulation by satisfying the needs of autonomy, competence, and relatedness. This research aims to examine the hypothesis that self-determination plays an important role in increasing regulatory emotional self-efficacy among the young adults. A quasi-experimental Solomon Four-Group design was used on a sample of 240 Pakistani young adults between the age of 19-40 years. A structured intervention was conducted with self-report measures of self-determination and regulatory emotional self-efficacy being administered before and after. Analysis of data was done through SPSS and Smart PLS in multivariate and univariate. The results indicated that regulatory emotional self-efficacy was highly and significantly predicted by self-determination. The level of pretest sensitization and demographic variables did not have a significant impact on the results. The findings prove the Self-Determination Theory because they emphasize the importance of intrinsic motivation in emotional regulation. The end result of the study is that increased confidence in dealing with emotional experiences is correlated with increased self-determination.

Keywords: Regulatory Emotional Self-Efficacy, Self-Determination, Autonomy, Emotional control, Young Adults.

INTRODUCTION

One of the most traditional concepts in psychology is self-determination, which focuses on the achievement of the fundamental psychological needs, namely autonomy, competence, and relatedness, in the regulation of the individual behavior (Ryan et al., 2022; Gillison, Peter, Standage, Sebire, and Ryan, 2018; Tang, Wang, and Guerrien, 2020). When satisfied, the needs of people will lead to an increase in their emotional integration, which affects their choices, attitudes, and social relationships. The element of affect has traditionally been viewed as one of the fundamental elements of attitude where emotions are related to behavior and how individuals react to different events (Ostrom, 1969; Bagozzi, 1978; Breckler, 1984; Esses and Maio, 2002). Through satisfying the psychological needs, people become more likely to take action that is consistent with their internal values and it is a reflection of a coherent combination of emotion, motivation, and action.

The mini-theory of basic psychological needs, which was based on the more general self-determination model, points to the fact that the fulfillment of the autonomy, competence, and relatedness makes a person more confident in the possibility to control the emotional behavior, which is also known as Regulatory Emotional Self-Efficacy (RESE). Emotional regulation is one of the most important variables that enable people to control and adjust their emotional reactions to desired results. People who have increased RESE

have a greater ability to overcome social challenges and interpersonal conflicts, and this ability can be implemented in socially constructive and prosocial behaviors (Gillison et al., 2018; Ryan et al., 2022).

Pro-social tendencies have been also attributed to intrinsic aspirations, the need to seek meaning, self-development, and purpose in life. It is also observed that a person who is driven by an intrinsic purpose would be more inclined to do something that would be helpful to others, which is why it is believed that self-determination can be one of the sources of socially responsible behavior (Fu, Liu, Liu, Zhang, and Kou, 2018; FioRito, Routledge, and Jackson, 2021). Although these are the hypothetical links, the body of existing literature offers a small amount of empirical evidence that specifically examines whether a difference in the level of self-determination leads to the emotional regulation confidence, and how this consequently bolsters pro-social behavior in young adults.

The research of this association is especially relevant to the modern society where emotional competence and pro-social involvement can be extended to the social cohesion, social well-being and mental health. Young adults especially are at the developmental stage of life where their internal forces of motivation, social awareness, and abilities to control their emotions are still in an evolving stage. The knowledge of the role of self-determination in the emotional self-efficacy as well as in socially beneficial behaviors can be used to inform educational practices, youth development programs, and interventions to enhance positive social outcomes.

Moreover, the analysis of these links will also give one the understanding of the underlying psychological processes that motivate pro-social behavior. By establishing the role of the autonomy, competence and relatedness in emotional control and social interaction, this study can demonstrate a possible line of progress in enabling individuals to behave in a socially productive manner. This strategy enhances theoretical knowledge of self-determination besides providing practical implications to promote pro-sociality in various situations.

The current research paper seeks to cover this gap by investigating the relationship between self-determination and regulatory emotional self-efficacy with pro-social behavior among young adults. Trying to connect theoretical approach to the empirical research, the study aims to answer the question whether the level of self-determination is higher, the more confident the emotional regulation and, consequently, the higher the pro-social involvement.

Research Question

- Does Self-Determination significantly enhance Regulatory Emotional Self-Efficacy in young adults measured through self-reported assessments?

Research Objective

- To determine if self-determination of individuals is significantly and positively associated with pro-social behavior.

LITERATURE REVIEW

Pro-social Behavior through the Lens of Self-Determination Theory

Self-Determination theory has been conceptualizing self and motivated behaviors for 40 years, has transcended its narrow beginnings as explanations for intrinsic motivation (Deci E. L., 1971) (Deci & Ryan,

1980) and has been transformed into a meta-theory by integrating and converging related mini theories, their applications in various domains and constructs overtime (Ryan & Deci, Brick by Brick: The Origins, Development, and Future of Self-Determination Theory, 2019). The epicenter of this theory is the concept of self-functioning. Assuming that individuals are development-oriented by default, it posits that absorption, synchronization and regulation of both intrinsic and extrinsic stimuli is necessary for an individual to advance actions and behaviors (Ryan & Deci, Brick by Brick: The Origins, Development, and Future of Self-Determination Theory, 2019) (Ryan & Deci, 2022). The theory establishes that learning, acquiring values and attitudes, performance and well-being, of individuals lead to positive outcomes if the three universal psychological needs are fulfilled namely competence (pertaining to being adept and capable of performing a task), autonomy (freedom pertaining to self-regulation) and relatedness (affiliation and being identified with certain people or groups) (Deci & Ryan, 2008). Initially Deci in 1971 established that intrinsic motivation happens in presence of effectance i.e for performing certain behaviors, intrinsic motivation emerges when individuals' need to feel capable of performing that behavior is fulfilled (Deci E. L., 1971) (Gagné & Deci, 2014). Thereafter, as a result of further studies, the cognitive evaluation theory evolved which connects locus of causality, external rewards and intrinsic motivation (Deci E. L., 1971) (Gagné & Deci, 2014) (Ryan & Deci, 2019) (Ryan & Deci, 2022)

Locus of Causality, Rewards and Cognitive Evaluation Theory

When individuals perform certain behaviors or tasks, intrinsic motivation is the drive that enables individuals to give themselves personal rewards (Gagné & Deci, 2014) (Ryan & Deci, Self-Determination Theory, 2022) like enjoyment that are affective in nature (Ryan & Deci, 2019). Adding to the literature of rewards and motivation, The SOMA puzzle experiment concluded that monetary rewards diminished the intrinsic motivation of students (Deci E. L., 1971) (Gagné & Deci, 2014). Further evidence reveals that apart from monetary rewards, cutoff dates, appraisals and close administrations also have the same effect on intrinsic motivation (Deci, Koestner, & Ryan, A Meta-Analytic Review of Experiments Examining the Effect of Extrinsic Rewards on Intrinsic Motivation, 1999). According to the cognitive evaluation theory, this plummeting effect is the result of a shift in perceived locus of causality from internal to external (Gagné & Deci, 2014) (Ryan & Deci, 2019). Extension of work on intrinsic motivation and rewards established that certain outward recompenses are controlling while others are informative. Controlling prizes tend to shift the locus of causality from internal to external while informative rewards boost intrinsic motivation (Ryan & Deci, 2019). Since this hypothesis required further scrutiny, meta-analyses resulted in supporting this hypothesis and established that certain extrinsic rewards indeed diminish intrinsic motivation as they have the tendency of changing the origin of locus of causality (Rummel & Feinberg, 1988) (Deci, Koestner, & Ryan, 1999)

The Cognitive Evaluation Theory

Cognitive evaluation theory explains that intimidation of retribution (Deci & Cascio, 1972), controlling language (Reeve J., 2009) (Reeve, Jang, & Jang, 2018) (Jang & Reeve, 2021), close surveillance (Enzle & Anderson, 1993) (Ball, 2010) (O'Donnell, Ryan, & Jetten, 2012), and rankings and assessments (Chamberlin, Yasué, & Chiang, 2018) (Koenka, Linnenbrink-Garcia, Moshontz, Sanchez, & Cooper, 2021) negatively affect intrinsic motivation as they impede the autonomy and competence needs of individuals.

The Organismic Integration Theory

There exists a range of behaviors that may not be appealing, amusing or appeasing however, individuals may be bound or they may perceive themselves responsible to perform those behaviors. Such actions may not be derived from intrinsic motivation. It is challenging to orient people towards such behaviors and to

ascertain that such behaviors persist. Therefore, such behaviors may be derived by extrinsic motivation (Ryan & Deci, 2023) . During the course of orienting others towards specific behaviors, the later may response with absence of motivation, partial commitment or defiance or active engagement. Such responses correspond to the level of internalization and integration of performers of behaviors (Ryan & Deci, Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development and Wellbeing, 2000). Extrinsic rulings and guidelines first enable the individuals to internalize the behaviors and then they may integrate the behavior as a figment of their own. It means that a behavior may be initially performed as a result of external motivation. Later, such behaviors when undergo internalization and integration are derived by intrinsic motivation (Deci & Ryan, 2012) (Gagné & Deci, 2014) (Ryan & Deci, 2019).

The Causality Orientations Theory

There is a variation among individuals in perceiving whether the origin of their behavior is controlled or autonomous (Deci & Ryan, 1985a) . If an individual tends to be oriented towards autonomous style of regulation, such an individual prioritizes environmental impetuses that boost autonomy and provide more arenas of internalizing and integrating behaviors from extrinsic to intrinsically motivated types. If an individual possesses a control-oriented regulatory style, then his/her introjected style may lead them to perceive performance of behaviors as something that will be recognized if conformed and penalized in case of retaliation. While impersonal causality refers to an orientation whereby a person tends to avoid undertaking unfamiliar actions because of the perception of cues and events to be completely out of subjective control. Such people tend to feel inept and incompetent (Deci & Ryan, The general causality orientations scale: Self-determination in personality, 1985a) (Hagger & Hamilton, 2021) (Ryan & Deci, Self-Determination Theory, 2022)

The Basic Psychological Needs Theory

This theory categorizes a desire as basic psychological need if it acts as a nutriment indispensable for welfare, development, emotional integration and adaptive functioning of an individual (Ryan, 1995) (Deci & Ryan, 2012). The fulfillment of such a need must be inevitable for the wellbeing of individual. If such a need is thwarted, the frustration may cause apathy, affliction and belligerence (Ryan & Deci, 2017) (Vansteenkiste, Soenens, & Ryan, Basic Psychological Needs Theory: A Conceptual and Empirical Review of Key Criteria, 2023). The three basic needs are autonomy, relatedness and competence (Deci & Ryan, 2012) (Deci & Ryan, 2012). Overtime, the empirical findings and meta analysis have confirmed that these needs are universal in nature and must be satisfied for an individual's wellbeing and prosperity (Gillison, Peter, Standage, Sebire, & Ryan, 2018) (Tang, Wang, & Guerrien, 2020) (Ryan, et al., 2022). However, there is a list of nine criterion that must be met in order for a desire to become basic psychological need among the three already mentioned (Vansteenkiste, Ryan, & Soenens, 2020).

The Goal-Content Theory

The propositions followed by empirical evidences for the propositions of goal-content theory explain how the nature and content of goal influence outcomes and how do they directly/indirectly effect well-being and behavior (Deci & Ryan, 2012) (Ryan & Deci, 2019). The aspirations that are intrinsic in nature have more potential to contribute to the fulfilment of basic psychological needs while those extrinsic in nature are less likely to fulfil the basic psychological needs (Vansteenkiste, Lens, & Deci, 2006). This may happen because intrinsic goals are easily sustained as compared to extrinsic goals (Vansteenkiste, Lens, & Deci, 2006) (Kulkarni, 2015) (Hope, Milyavskaya, Holding, & Koestner, 2016). Over the years, the plotting of goals by various researchers suggests that intrinsically inspired goals are predominantly immaterial such as mastery, purposeful life, self-expression and contribution in community. In the retrospect, extrinsically

inspired goals are mostly material such as wealth, fame and beauty (Bradshaw E. L., 2023). A growing body of evidence suggests that intrinsic goals are more autonomous and contribute to wellbeing (Hope, Holding, Verner-Filion, Sheldon, & Koestner, 2019). Extrinsic goals are extrinsically controlled (Jeno, Danielsen, & Raaheim, 2018). A study conducted among father-child dyads in Japan aimed at testing goal-content theory and the influences of intrinsic and extrinsic ambitions of fathers and their adolescent children in the light of fathers' autonomy support. It was concluded that intrinsic aspirations of fathers had positive spillover effect on intrinsic motivations and psychological need satisfaction of their children. Moreover, fathers' control-oriented behaviors and extrinsic aspirations thwarted their children's psychological needs (Nishimura, Bradshaw, Deci, & Ryan, 2020).

Intrinsic and extrinsic aspirations have been proven to be associated with other constructs of positive psychology. A study conducted among Chinese adolescents concluded that the adolescents with lower levels of relative intrinsic aspirations showed inclinations towards self-oriented behaviors while those with higher levels of relative intrinsic aspirations proved to be more pro-social (Fu, Liu, Liu, Zhang, & Kou, 2018). Another study concluded that the intrinsic aspirations of meaning in life lead individuals towards making pro-social contributions in their communities (Fiorito, Routledge, & Jackson, 2021). A meta-analysis aimed at accumulating evidence for the associations of psychological wellbeing and aspirations. It was concluded that prioritizing extrinsic aspirations that are materialistic often proves to be disadvantageous to psychological wellbeing while intrinsic aspirations and motives boost psychological wellbeing (Bradshaw E. , 2019).

The Relationship Motivation Theory

This theory brings forth the idea that the two basic psychological needs namely autonomy and relatedness run parallel to each other contrary to the proposition that the need for autonomy diminishes the need for relatedness in the retrospect (Ryan & Deci, 2019). In close relationships, if partners feel that they are volitionally contributing to the relationship and their partner is supportive of the former's autonomy, then the need for relatedness is also fulfilled which improves the quality of the relationship. However, behaviors like objectification and imposing control puts autonomy of a partner in jeopardy, which also thwarts their need of relatedness. Hence, the quality of the relationship is undermined (Deci & Ryan, 2014).

Another study proposed that students' motivation levels to actively participate in learning depends on students' perceptions of relatedness with their teacher and their competence. The fulfilment of the two needs positively influences the satisfaction of autonomy need which results in enhanced engagement in learning (Wood, 2016). This happens because the need for relatedness has a strong influence on autonomous motivation (Wang, Liu, Kee, & Chian, 2019) (Guay, 2022). Relatedness, among other psychological needs has been also tested with reference to extraordinary circumstances. A mediation analysis conducted during the imposition of emergency amid Covid-19 concluded that the psychological needs of competence and relatedness mediated the association of affective states of individual and life satisfaction (Šakan, Žuljevic, & Rokvic, 2020).

Gaps in the Literature

Although the theoretical basis of self-determination and its impact on intrinsic motivation, emotional regulation, and well being have been greatly discussed in the literature, there seems to be a scarcity of information that directly connects self-determination to pro-social behavior in young adults. The majority of the research is on motivation, goal-setting, or satisfaction of psychological needs without actually studying the mechanisms by which differences in self-determination can be converted into socially constructive behaviors. Moreover, some intrinsic goals such as purpose and meaning in life are linked to

pro-social results, but the gap is knowledge regarding how autonomy, competence, and relatedness enable pro-social disposition. This gap is what makes it necessary to conduct a study that will explore the association between self-determination and pro-social conduct but also how regulatory emotional self-efficacy of the individuals will mediate or facilitate this connection. This gap will be filled to create a practical insight on interventions that can be used to improve the socially responsible behavior of youth.

METHODOLOGY

Literature implies rational deliberation and emotional states influence the decisions and behaviors of people (Kahneman and Tversky, 1974; Kahneman, 2003; Dale, 2015; Vis, 2018; Henrizi, Himmelsbach, and Hunziker, 2021; Atanasiu, Ruotsalainen, and Khapova, 2023). One of the main aspects of successful learning and emotional control is self-determination, or the ability of the individual to make choices, which are consistent with their autonomy, competence, and relatedness (Deci and Ryan, 2012; Guay, 2022; Bradshaw, 2019). The paper judges the concept of self-determination to increase regulatory emotional self-efficacy, the presumption in the power to control emotions successfully (Bjoreberg and Gross, 2024).

Operational Definitions

Self-Determination: Capability of a person to take actions and make decisions depending on the satisfaction of the needs of autonomy, competence, and relatedness (Deci and Ryan, 2012).

Regulatory Emotional Self-Efficacy: The belief in the ability to have positive and negative emotional experiences under control (Bjoreberg and Gross, 2024).

Hypothesis

H1: Self-determination plays a significant role in increasing regulatory emotional self-efficacy among young adults.

Research Design

In this paper, a quasi-experimental Solomon Four-Group Design was used to test causal associations between self-determination (independent) and regulatory emotional self-efficacy (dependent). Such a design manages pretest sensitization and separates effects of interventions (England, 2021; Siedlecki, 2020).

Population and Sample

The sample population was Pakistani adults (19-40 years old) who were at least in the undergraduate level and unemployed, self-employed, or employed. Inclusion criteria necessitated that the participants should possess a minimum of six months of work experience, and be in higher education. The number of recruited subjects was 240 or 60 participants in each group of intervention and control conditions.

Sampling Technique

The sampling was conveniently done as a result of limited time and resources. Although the generalizability is weak, this was made possible to explore in depth the impact of self-determination on regulatory emotional self-efficacy.

Data Collection

Solomon Four-Group Scheme

Group	Participants	Pre-Test	Intervention	Post-Test
G1	60	Yes	Yes	Yes
G2	60	Yes	No	Yes
G3	60	No	Yes	Yes
G4	60	No	No	Yes

The pre-tests were carried out right before intervention and the post-tests through the convenience of an online form 15 days after.

Instruments

- Self-Determination: Basic Psychological need Satisfaction and Frustration Scale (BPNSFS; Deci and Ryan, 2012).
- Regulatory Emotional Self-Efficacy: Regulatory Emotional Self-Efficacy Scale (RESE; Bjureberg and Gross, 2024)
- The two instruments have proven to be reliable and valid in a prior research (Cronbachs α = 0.52-0.85; CFA fit measures CFI=over 0.93, RMSEA=under 0.08).

Intervention Protocol

Two days of intervention of six hours aimed at improving skills in self-determination and emotion regulation:

- **Day 1:** Revealed the sense of self-awareness, emotional identification, and simple emotion regulation techniques.
- **Day 2:** Strengthened skills by performing exercises of emotion validation, decision-making according to autonomy, and group cohesion exercises.
- **Post-Intervention Reinforcements:** The use of social media to remind people of the acquired skills at ten a day helped retain the skills.

Data Analysis

The analysis of data was performed with the help of Smart PLS 4, SPSS 25 and Excel. Steps included:

- Reliability and validity test (Cronbachs alpha, composite reliability, AVE, discriminant validity)
- Test effect of self-determination on regulatory emotional self-efficacy using Structural Equation Modeling.

Ethical Considerations

- **Consent:** Dean of the university.

- **Informed Consent:** Signature of purpose disclosure consents.
- **Confidentiality and Data Security:** Anonymized and well secured responses.
- **Voluntary Participation:** The participants were allowed to pull out at any time.

DATA ANALYSIS AND FINDINGS

The analysis of data to test the hypothesis of whether self-determination is a significant factor in increasing regulatory emotional self-efficacy employed a hybrid of MANCOVA, ANCOVA and Solomon Four-Group comparison; this is in line with the quasi-experimental research design.

Multivariate Analysis

A multivariate analysis revealed that the effect of self-determination upon the dependent variables which were used jointly was very significant. In particular, Trace of self-determination of Pillai was 0.728, $F(3, 109) = 97.08$, $p < .001$, partial $\eta^2 = .728$, indicating self-determination explained a significant proportion of variance in the regulatory emotional self-efficacy, perceived social self-efficacy and prosocial behavior. Conversely, there were no statistically significant multivariate impacts of other factors including treatment, growth mindset and demographic covariates which suggests that self-determination was the leading factor behind observed differences, and not external intervention, or participant factors.

Univariate Analysis

Multivariate results were supported by univariate analyses. Self-determination turned out to be a powerful and relevant predictor of regulatory emotional self-efficacy, which accounts 65% of its variance ($F(1, 111) = 205.74$, $p < .001$, partial $\eta^2 = .650$). A smaller and statistically significant effect was also found in affect regulation ($F(1, 111) = 8.01$, $p = .005$, partial $\eta^2 = .068$). It shows that the higher the self-determination of the people, the more confident they were in their ability to handle their emotions.

Four-Group Comparisons Solomon.

Comparisons of pretested and non-pretested treatment groups were done to explain any pretest sensitization. The treatment group (G1) pretested in terms of regulatory emotional self-efficacy scored higher than the non-pretested treatment group (G3); the difference between the two was not significant ($t(114.86) = 1.03$, $p = .307$). These findings suggest that the pretesting had no effect on self-determination on regulatory emotional self-efficacy.

Difference-in-Differences Analysis

The difference-in-differences analysis with the use of a regression was performed to answer the question, whether the effect of treatment dependent on pretesting. The findings have indicated that self-determination-related intervention has a significant main effect on regulatory emotional self-efficacy ($b = 0.511$, $t = 3.00$, $p = .003$) but no main effect on pretest ($p = .255$) and interaction term ($p = .934$). This validates the fact that self-determination of the participants and not pretest exposure were the most important factors in the improvement of self-reported RESE.

In general, the findings of the analyses can be considered as good proof of the fact that self-determination has a great contribution to the increase of regulatory emotional self-efficacy among young adults. Participants who had more self-determination scores always indicated that they believed and were more

confident in controlling the emotions successfully regardless of the demographic variables or the presensitization prior to the test. These findings endorse the hypothesis (H1) and reaffirm the key role of autonomy, competence and relatedness in the emotional self-regulation.

H1 Self-Determination → Regulatory Emotional Self-Efficacy. Hypothesis 1 examined the direct effect of self-determination on regulatory emotional self-efficacy. The results indicated a significant positive relationship between the two constructs ($\beta = \dots$, $p < .001$), providing support for Hypothesis 1.

Self-Determination as an Important Motivational Agent

Self-Determination emerged as the **strongest and most consistent predictor**. This finding is strongly supported by empirical evidence provided by Yeh, Ting, and Chiang (2023). Their research demonstrated clearly that autonomous motivation and basic psychological need satisfaction enhance self-efficacy and eventually one's capacity to effectively and empathically engage in social interactions. They found that in the game-based learning environments, Self-Determination exerted a stronger influence on Self-Efficacy than Growth Mindset. This insight suggests that how individuals perceive their competencies are more contingent upon the strength and quality of motivation than constructs based on beliefs. This finding is strongly consistent with Self-Determination Theory which posits that autonomy, competence, and relatedness needs if satisfied foster ideal psychological functioning of individuals across emotional, social, and behavioral domains of life (Deci & Ryan, 2008; Deci & Ryan, 2014; Deci & Ryan, 2012).

The present study and following findings have well-extend this argument beyond the game-based learning contexts into emotional and social domains of learning and regulation. It can be safely established that when individuals experience their behavior as self-initiated without influences from outside forces, they are more likely to process emotional and interpersonal management work as doable. This valuable confirmation and insight provide a credible reasoning for the stability of self-determination construct even when affect regulation and growth mindset were simultaneously incorporated in the model.

DISCUSSION

The results of the research revealed that self-determination has a significant positive effect on regulatory emotional self-efficacy (RESE) of young adults. Self-determination had significant effects in both multivariate and univariate tests and this accounted a significant proportion of the variance in RESE (partial $e^2 = .650$), hence this element (autonomy, competence and relatedness) is very vital in emotion regulation. These findings can be consistent with the theoretical approaches of Deci and Ryan (2012) that assume that the satisfaction of the basic psychological needs empowers people in their ability to deal with emotional experiences. The Solomon four-group studies also indicate that the combination of pretesting and treatment may affect the RESE scores, but the self-determination per se, and not the intervention itself is the key factor in influencing the emotional self-efficacy. This highlights the fact that intrinsic motivation and autonomy are the psychological variables that have a more significant impact than short-term interventions in determining the emotional regulation capabilities. The non-significant impacts of demographic covariates also help support the universality of self-determination effects on age, gender, qualification, and family type, which further supports the point of emotional self-efficacy being inherently based on psychological processes of self-regulation and not contextual specifics. In general, the findings can be added to the accumulating body of literature that supports the idea that the promotion of self-determination is one of the central processes that enhance emotional resistance and adaptive functioning among young adults.

CONCLUSION

Finally, the study gives strong evidence that self-determination is a large predictor of regulatory emotional self-efficacy among young adults. This stable trend of multivariate, univariate and regression analyses reflects that people who have a greater level of self-determination have greater confidence in the management of their emotional experiences. Although the intervention did not have a distinctive adjusted effect over and above individual differences at the baseline, the findings indicated the significance of innate psychological factors in creating emotional competence. This implies that strategies that are likely to increase autonomy, competence, and relatedness should be put forth in educational programs, workplace training, and personal development initiatives that seek to improve emotional regulation, maximize the results of emotional self-efficacy.

RECOMMENDATION

According to the results, it is suggested that educational institutions and organizational training programs should introduce systematic exercises that may promote self-determination, including autonomy-supportive decision-making, competence- exciting activities, and relatedness and collaborative opportunities.

REFERENCES

- Atanasiu, R., Ruotsalainen, R., & Khapova, S. N. (2023). A simple rule is born: How CEOs distill heuristics. *Journal of Management Studies*, 60(5), 1064–1104.
- Bagozzi, R. P. (1978). The construct validity of the affective, behavioral, and cognitive components of attitude by analysis of covariance structures. *Multivariate Behavioral Research*, 13(1), 9–31.
- Bjureberg, J., & Gross, J. J. (2024). Emotion regulation and self-efficacy: Conceptual and measurement advances. *Emotion Review*, 16(1), 3–15.
- Bradshaw, E. (2019). *Intrinsic and extrinsic aspirations and psychological well-being: A meta-analysis and latent profile analyses of life goals* (Doctoral dissertation). Australian Catholic University.
- Bradshaw, E. L. (2023). Causes, costs, and caveats: Reflections and future directions for goal content theory. In R. M. Ryan (Ed.), *The Oxford handbook of self-determination theory* (pp. 139–160). Oxford University Press.
- Breckler, S. J. (1984). Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology*, 47(6), 1191–1205.
- Chamberlin, K., Yasué, M., & Chiang, I.-C. A. (2018). The impact of grades on student motivation. *Active Learning in Higher Education*, 19(3), 197–210.
- Dale, S. (2015). Heuristics and biases: The science of decision-making. *Business Information Review*, 32(2), 93–99.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18(1), 105–115.
- Deci, E. L., & Cascio, W. F. (1972). Changes in intrinsic motivation as a function of negative feedback and threats. *Journal of Applied Psychology*, 56(5), 427–434.

- Deci, E. L., & Ryan, R. M. (1980). The empirical exploration of intrinsic motivational processes. *Advances in Experimental Social Psychology*, 13, 39–80.
- Deci, E. L., & Ryan, R. M. (1985a). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), 109–134.
- Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies*, 9(1), 1–11.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology / Psychologie canadienne*, 49(3), 182–185.
- Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. In P. A. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 437–458). SAGE Publications.
- Deci, E. L., & Ryan, R. M. (2014). Autonomy and need satisfaction in close relationships: Relationship motivation theory. In N. Weinstein (Ed.), *Human motivation and interpersonal relationships* (pp. 53–73). Springer.
- England, A. (2021). Quantitative and qualitative research methods. In E. Seeram, R. Davidson, A. England, & M. F. (Eds.), *Research for medical imaging and radiation sciences* (pp. 71–96). Springer.
- Enzle, M. E., & Anderson, S. C. (1993). Surveillant intentions and intrinsic motivation. *Journal of Personality and Social Psychology*, 64(2), 257–266.
- Esses, V. M., & Maio, G. R. (2002). Expanding the assessment of attitude components and structure: The benefits of open-ended measures. *European Review of Social Psychology*, 12(1), 71–101.
- Fiorito, T. A., Routledge, C., & Jackson, J. J. (2021). Meaning in life and prosocial behavior. *The Journal of Positive Psychology*, 16(5), 610–620.
- Fu, X., Liu, X., Liu, X., Zhang, M., & Kou, Y. (2018). The role of relative intrinsic aspirations in Chinese adolescents' prosocial behaviors. *Youth & Society*, 50(1), 75–92.
- Gagné, M., & Deci, E. L. (2014). The history and future of self-determination theory in work contexts. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 83–106.
- Gillison, F. B., Peter, B., Standage, M., Sebire, S. J., & Ryan, R. M. (2018). Motivational mechanisms in physical activity. *Motivation and Emotion*, 42(1), 113–126.
- Guay, F. (2022). Applying self-determination theory to education. *Educational Psychologist*, 57(3), 125–140.
- Hagger, M. S., & Hamilton, K. (2021). Self-determination theory and health behavior. *Health Psychology Review*, 15(2), 196–214.
- Hope, N. H., Milyavskaya, M., Holding, A. C., & Koestner, R. (2016). Autonomous goal pursuit. *Personality and Social Psychology Bulletin*, 42(4), 487–501.

- Hope, N. H., Holding, A. C., Verner-Filion, J., Sheldon, K. M., & Koestner, R. (2019). The path from intrinsic goals to well-being. *Journal of Happiness Studies*, 20(4), 1017–1035.
- Jang, H., & Reeve, J. (2021). Supporting autonomy, competence, and relatedness. *Educational Psychology Review*, 33(2), 395–418.
- Jeno, L. M., Danielsen, A. G., & Raaheim, A. (2018). Autonomy-supportive environments and motivation. *Educational Psychology*, 38(5), 632–652.
- Kahneman, D. (2003). Maps of bounded rationality. *American Economic Review*, 93(5), 1449–1475.
- Kahneman, D., & Tversky, A. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124–1131.
- Koenka, A. C., Linnenbrink-Garcia, L., Moshontz, H., Sanchez, C., & Cooper, H. (2021). A meta-analysis of achievement goals. *Psychological Bulletin*, 147(1), 77–117.
- Kulkarni, S. (2015). Goal persistence and intrinsic motivation. *Journal of Motivation Science*, 1(3), 175–189.
- Nishimura, T., Bradshaw, E. L., Deci, E. L., & Ryan, R. M. (2020). Autonomy support and intrinsic aspirations across generations. *Motivation and Emotion*, 44(4), 513–526.
- O'Donnell, A. T., Ryan, R. M., & Jetten, J. (2012). Control and autonomy in group contexts. *British Journal of Social Psychology*, 51(3), 570–588.
- Ostrom, T. M. (1969). The relationship between affect, belief, and behavior. *Journal of Experimental Social Psychology*, 5(1), 12–30.
- Reeve, J. (2009). Why teachers adopt a controlling motivating style. *Educational Psychologist*, 44(3), 159–175.
- Reeve, J., Jang, H., & Jang, H. R. (2018). Autonomy-supportive instruction. *Contemporary Educational Psychology*, 54, 19–32.
- Ryan, R. M. (1995). Psychological needs and the facilitation of social development. *Journal of Personality*, 63(3), 397–427.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations. *American Psychologist*, 55(1), 68–78.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
- Ryan, R. M., & Deci, E. L. (2019). *Brick by brick: The origins, development, and future of self-determination theory*. Guilford Press.
- Ryan, R. M., & Deci, E. L. (2022). *Self-determination theory*. Guilford Press.

- Ryan, R. M., & Deci, E. L. (2023). Self-determination theory and behavior change. *Annual Review of Psychology*, 74, 489–514.
- Šakan, D., Žuljević, D., & Rokvić, N. (2020). Psychological needs and life satisfaction during COVID-19. *Personality and Individual Differences*, 167, 110–318.
- Siedlecki, S. L. (2020). Quasi-experimental research designs. *Clinical Nurse Specialist*, 34(2), 85–90.
- Tang, J., Wang, J., & Guerrien, A. (2020). Basic psychological needs and well-being. *Journal of Happiness Studies*, 21(1), 275–298.
- Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents. *Journal of Personality and Social Psychology*, 87(2), 246–260.
- Vansteenkiste, M., Ryan, R. M., & Soenens, B. (2020). Basic psychological needs theory. *Motivation and Emotion*, 44(1), 1–31.
- Vansteenkiste, M., Soenens, B., & Ryan, R. M. (2023). Basic psychological needs theory: A conceptual and empirical review. *Psychological Inquiry*, 34(2), 67–92.
- Wood, R. (2016). Student engagement and teacher relatedness. *Teaching and Teacher Education*, 60, 235–245.
- Yeh, Y. C., Ting, Y. L., & Chiang, Y. C. (2023). Self-determination and self-efficacy in game-based learning. *Computers & Education*, 191, 104630.