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Exploring the Impact of Prosocial Actions on Innovative Behavior: The Roles of Creative Thinking and Coping Humor

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This study investigates the relationships among prosocial actions, coping humor, creative thinking, and innovative behavior within organizational settings. It aims to understand how prosocial actions influence employees' innovative behaviors directly and indirectly through creative thinking and whether coping humor serves as a moderating factor in these relationships. The research was conducted in the Kingdom of Saudi Arabia, involving 303 employees from various departments across multiple firms. Data were collected using structured questionnaires with established scales. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed for analysis to test the hypothesized relationships and assess the mediation and moderation effects within the conceptual model. The results indicate that prosocial actions significantly enhance both creative thinking and innovative behavior. Creative thinking was found to mediate the relationship between prosocial actions and innovative behavior, emphasizing its critical role in translating collaborative behaviors into practical innovations. Furthermore, coping humor significantly moderated these relationships, strengthening the positive effects of prosocial actions on both creative thinking and innovative behavior. This study contributes to the literature by integrating coping humor as a moderator, highlighting its relevance in fostering workplace creativity and innovation. It offers practical insights for organizations aiming to cultivate a collaborative, innovative, and humor-empowered

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work culture.

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Introduction

Work has increasingly been viewed as an environment that requires people to be dynamic and adaptable for the sake of innovativeness in adding their share for organizational success. Innovative behavior and creative thinking are, therefore, important parts of the process through which employees come to identify problems, formulate solutions, and develop novel approaches to improving processes and outcomes (Khattak & Irshad, 2024). While innovative behavior is the development of ideas, their promotion, and realization, creative thinking is in the divergent way of thinking and how someone puts together concepts in a different way (Lau et al., 2024). Prosocial behaviors, which involve assisting someone at work or in the work team to accomplish a team-based objective, have been substantial contributors to these results because this develops inter-personal trust and develops teamwork environments (Wang et al., 2024). Similarly, coping humor has attracted interest because it can impact the creative and innovative processes by creating emotively uplifting workplaces (Meyer, 2024). The dynamics of prosocial actions, coping humor, and workplace creativity are embedded within broader organizational frameworks that emphasize emotional intelligence, resilience, and social capital (Sakaryalı et al., 2024). Previous studies have examined each of these factors in isolation, but the accumulation of all these factors on building creativity and innovation is an area that has been relatively less researched (Tang et al., 2024). Understanding the relationships is very insightful about how organizations might build conditions that maximize the capacities of employees to handle modern workplace stressors, like competition, rapid change, among others (Kapoor, 2024). Focusing on the mediating and moderating relationships, this study attempts to bridge gaps in trying to find how prosocial actions and coping humor interact to influence innovative behavior and creative thinking.

Numerous studies indicate that prosociality is the primary factor behind the majority of innovative behaviour and idea generation at the individual level, if not all of them (J. Zhang et al., 2024). Prosociality herein represents acts of voluntary behavior used positively for the benefit of people others care about,

such as providing support to colleagues either through resources or emotional reasons (Gao et al., 2024). Such acts have often increased team cohesion and developed some kinds of trust, which remains more viable during this crucial relationship at least to foster collaboration and initiate creation within many groups (Pathak & Jha, 2024). For example, studies have shown that prosocial employees are generally able to create psychologically safe teams where members feel free to express uncommon ideas and test them without worrying about failure (Sharma & Dhar, 2024). Moreover, prosociality has been positively correlated with intrinsic motivation, the most significant motivator for creative thinking, as prosocial employees are motivated by contributing positively to their social and work environment (Mumtaz, 2024).

In particular, creative thinking was identified as an emotionally and socially influenced cognitive process (Fu & Zhang, 2024). Prosocial actions have been reported to directly enhance creative thinking due to the increase in positive emotional states, such as gratitude and happiness, which in turn broaden the cognitive horizons and improve problem-solving ability, according to Pedrazzini et al. (2024). Similarly, innovative behavior, which is defined as the use of innovative ideas, has been shown to be enhanced by the prosocial culture that prosocial acts create (J. W. Zhang et al., 2024). In many organizational contexts, such as technology firms and schools, there are studies that demonstrate positive correlations between prosociality and innovation (De Clercq & Belausteguigoitia, 2024).

Coping humor is also one of the key contributors to workplace creativity and innovation. Coping humor is defined as the ability to use humor to manage stress. It has been proven to increase emotional resilience, thus positively contributing to work environments (González Moreno & Molero Jurado, 2023). Evidence shows that humor stimulates divergent thinking, which is an essential characteristic of creativity, enabling the person to look at things from various perspectives (Dai et al., 2023). Humor has also been reported to cushion the negative impact of work-related stress so that workers are allowed to focus on creative and innovative activities (Segundo-Marcos et al., 2023). Such findings confirm that coping humor may therefore serve to balance the synergy between prosocial behaviors and innovative performance for the good of both the individual and the organization.

Despite much research on prosocial actions and coping humor, there is still a wide gap in the extant literature (Wang, 2023). First, while there is research done on individual effects of prosociality and humor on creativity and

innovation, limited research has explored their combined influence, especially in mediating and moderating relationships (Da Costa Dutra et al., 2023). For instance, the specific mechanisms through which prosocial behavior is translated into innovative behavior through creative thinking are not well understood, and there is a gap in understanding the cognitive processes involved (Maun et al., 2023). Second, coping humor as a moderator has been studied mainly in the context of stress management, with little attention paid to its impact on fostering creativity and innovation in team settings (Kaimal et al., 2023). Moreover, studies so far have neglected many contextual variables that are likely to affect these relationships-organizational culture, leadership types, job types (Rodrigues et al., 2023). For instance, prosocial behavior tends to be generally adaptive but can be contingent upon the level of organizational support or independence that exists (Rojas et al., 2023). Equally so, whereas cultures or organisational settings are capable of ascertaining one's humor leading them to an impact on this moderation process, a major research gap emerges since most related empirical works, due to not longitudinally ascertained changes over a time interval, do lack cross sectional designs and could provide scant insight into potential causative mechanism (Jin & Wang, 2023). Lastly, though the broaden-and-build theory and the interactionist model of innovation can be theories for forming a basis to understand such dynamics, real empirical studies rarely fully incorporate these theories (Xing, 2023). This gap limits generalization and applicability of research findings across diverse organizational contexts (Hammad, 2023). Addressing these areas will help in understanding how prosocial acts and coping humor create a synergy that drives creativity and innovation in the workplace.

This research will attempt to address the most pertinent questions about how prosocial behavior interfaces with coping humor, creative thinking, and innovative behavior. The first aim is to investigate the direct association of prosocial actions and innovative behavior and the role altruistic behaviors play in generating a climate that facilitates innovation. This involves reviewing how prosociality facilitates interpersonal trust, teamwork, and the actualization of ideas (Press & Erel, 2023). The second objective is to examine the effects of prosocial actions on creative thinking, based on the cognitive and emotional processes that allow a person to generate new ideas. This encompasses the way in which prosocial behaviors are conducive to positive emotional states and cognitive flexibility, both of which are prerequisites for creativity (Afriyati et al., 2023). A third critical objective is to probe how creative thinking mediates

the connection between prosocial actions and innovative behavior. This will follow how cognitive activities operate to link sociality with pragmatic innovation, illuminating mechanisms that translate creativity to an actionable outcome (Nguyen et al., 2022). In addition, the paper is interested in examining if coping humor moderates those relationships. It digs deeper to the effect that humor brings into prosocial actions since it forms environments of emotional upliftment and helps take risks in creativity and innovation (Mutonyi et al., 2022). The focus is basically on giving an overview of what drives creativity and innovation at the workplace, concentrating on the synergistic effect of prosocial action and coping humor. In light of this, the research is aimed at filling such gaps and giving some concrete insights on trying to reduce employee performance and well-being in organizations.

This study is important because it gives a holistic understanding of how prosocial actions and coping humor influence creative and innovative outcomes in the workplace. Through such relationships, the research can offer insight to organizations in the direction of developing a culture of creativity and innovation. The findings can inform strategies for enhancing employee engagement, collaboration, and resilience, which will contribute to improved organizational performance and adaptability in a rapidly changing business environment (Miller, 2022). The study fills some of the critical gaps in the literature, advancing theoretical and empirical knowledge in the field.

This research is founded on a theoretical basis drawn from some of the established frameworks that include the broaden-and-build theory and the interactionist model of innovation. The broaden-and-build theory stipulates that positive emotions, such as those caused by prosocial actions and humour, enlarge cognitive resources and build permanent psychological and social capacities (Gupta et al., 2022). This theory forms the basis of understanding how prosocial behaviors and coping humor contribute to creative thinking and innovative behavior by enhancing emotional resilience and fostering cognitive flexibility (Li et al., 2022). The interactionist model of innovation discusses how individual, group, and organizational factors drive innovation in the organization (Rojas et al., 2023). This model supports the focus of this study on the integrated influence of prosocial actions and coping humor since it emphasizes interpersonal dynamics and social relations that enhance creativity and innovative processes (Rodrigues et al., 2023). The theoretical models of emotional contagion also demonstrate that positive emotions can cascade in a team setup to make the creativity and innovation potential of the group from

prosociality and humor more elevated (Rojas et al., 2023). These theoretical models would serve as a good ground on which to base an investigation of the mediating variable creative thinking and the moderating variable coping humor. Along with these theories is a research undertaking to attempt to give a more all-encompassing understanding of how different factors, especially social/emotional factors drive innovation within an organization. These explorations should be grounded in theory; moreover practical applications (Jin & Wang, 2023).

Literature Review

Employees' innovative behavior and creative thinking have been very popular topics of study in organizational and psychological research due to their central role in competitive advantage and organizational growth (Khattak & Irshad, 2024). Theoretical views, including the Componential Theory of Creativity and the Interactionist Model of Innovation, emphasize that creativity emerges when people create novel and useful ideas within a facilitative work environment (Li et al., 2022). These concepts are then translated into action plans by innovative behavior, and idea promotion and implementation go under this (Gupta et al., 2022). Empirical researches indicate that task complexity, autonomy, and intrinsic motivation increase creative thinking to a great extent. Transformational leadership style and participative decision-making create opportunities for innovative actions (Miller, 2022). In addition, a supportive organizational climate, characterized by psychological safety and open communication channels, allows employees to take calculated risks and communicate unconventional ideas without fear of being criticized (Mutonyi et al., 2022). This interplay between individual creativity and external stimuli underscores the dynamic nature of innovative behavior in workplace settings. Recent research highlights that cognitive diversity, emotional intelligence, and resilience play a significant role in fostering innovative behavior and creative thinking (Nguyen et al., 2022).

Teams with diverse skills and perspectives are more likely to generate creative solutions due to varied approaches to problem-solving (Afriyati et al., 2023; Press & Erel, 2023). Emotional intelligence helps employees manage stress and interpersonal conflicts, creating an environment conducive to sustained innovation (Press & Erel, 2023). Organizational factors, such as training programs aimed at enhancing creative problem-solving skills and reward systems that recognize and incentivize innovative contributions,

significantly influence employees' propensity for creative engagement (Hammad, 2023). Technological tools and platforms that facilitate information sharing and ideation across geographical boundaries in digital workplaces have emerged as enablers of creativity (Xing, 2023). However, challenges such as excessive workload, bureaucratic constraints, and fear of failure can suppress the creative potential of employees, calling for strategies that balance innovation with operational efficiency (Jin & Wang, 2023).

Hypothesis Development

Prosocial actions and innovative behavior: a huge relationship exists, where a good amount of studies have found out a strong positive correlation between altruistic behaviors and workplace innovation (Rojas et al., 2023). Voluntary behaviors directed toward the betterment of others are prosocial actions. Such actions increase the level of trust, cooperation, and collaboration within the teams (Rodrigues et al., 2023). Studies have found out that employees who engage in prosocial behaviors tend to develop positive interpersonal dynamics that promote idea-sharing and experimentation (Kaimal et al., 2023). For example, research has shown that prosocial behaviors can overcome hierarchical boundaries, allowing employees to feel psychologically safe enough to suggest and test new solutions. Similarly, organizational citizenship behavior (OCB), closely related to prosociality, has been positively linked with innovative behavior through mechanisms such as increased team cohesion and mutual support (Maun et al., 2023). Empirical evidence also indicates that prosociality boosts intrinsic motivation of employees by satisfying important psychological needs related to belongingness and meaningfulness, which are pertinent for innovative work (Da Costa Dutra et al., 2023). Such actions have been identified as specifically impactful in a team context; trust and respect, bred by prosocial actions, increase collective innovation. Based on such empirical findings, it is hypothesized that prosocial actions are very influential factors for innovative behavior (Wang, 2023). The theoretical basis for this hypothesis is the understanding that prosociality triggers positive emotions and social reciprocity, which are both important for fostering creativity and innovation (Segundo-Marcos et al., 2023). Employees who exhibit prosocial behaviors are likely to receive reciprocal support and encouragement, thus making them more willing to explore and implement innovative ideas (Dai et al., 2023). The prosocial actions also make contributions towards building an organizational culture conducive to the creative behavior (González Moreno &

Molero Jurado, 2023). Organizations could thus draw upon prosocial actions to bring about innovative behavior at the individual and collective levels by espousing values such as empathy, cooperation, and mutual respect (Segundo-Marcos et al., 2023). Based on the assumptions that prosocial behavior ensures positive social and emotional benefits, a conducive environment for innovation can be obtained.

H1. Prosocial actions significantly influence the innovative behavior.

Studies about prosocial actions suggest they make significant impacts on cognitive processings, among them the development of creative thinking (De Clercq & Belausteguigoitia, 2024). Actions targeted toward helping others, otherwise called prosocial, have high linkage to social and emotional prosperity that positively contributes to one's cognitive working (J. W. Zhang et al., 2024). Such prosocial workers tend to be more joyous, hence more filled with positive emotions such as happiness, gratitude, or joy; which are reported to increase one's breadth of thought and problem-solving capabilities (Pedrazzini et al., 2024). This promotes social interaction and co-operative exchange, both drivers of creativity. For instance, evidence from studies shows that employees who practice prosocial behavior have a tendency to take perspectives and show more empathy as required for innovation (Fu & Zhang, 2024). In addition, prosociality is also associated with trust and camaraderie among members, hence an atmosphere of brainstorming and idea generation. Prosocial activities also have the positive reinforcing effect that enhances individuals' self-confidence, and people think in a more divergent and risk-taking way (Mumtaz, 2024). Building from these empirical findings, prosocial activities significantly influence creative thinking, and it is hypothesized (Sharma & Dhar, 2024). The theoretical underpinning for this hypothesis is rooted in the broaden-and-build theory that propounds positive emotions built out from prosocial behaviors that are thought to broaden individuals' cognitive capacity and build enduring resources for creativity (Pathak & Jha, 2024). Prosocial workers are more likely to engage in cognitive exploration and divergent thinking since they have more emotional resilience and openness to new ideas (Gao et al., 2024). In addition, the reciprocating nature of prosocial acts promotes a collaborative culture of mutual encouragement, which stimulates creative ideation. In an organizational context, these behaviors promote an ecosystem where workers feel empowered to voice their ideas and experiment without fear of judgment (J. Zhang et al., 2024). Thus, prosocial actions do not only make interpersonal relationships better but are also an important

facilitator of creative thinking. The hypothesis is therefore supported.

H2. Prosocial actions significantly influence the creative thinking.

Mediation of creative thinking in prosocial actions to innovative behavior is generally known by various researchers (Kapoor, 2024). Creative thinking refers to the ability to generate novel and useful ideas. It can be considered as a precursor to innovation since it allows a person to think about and modify a solution before it is actually put into practice (Tang et al., 2024). The mechanism by which prosocial behaviors contribute to creative thinking includes emotional upliftment and increased social interaction (Sakaryalı et al., 2024). Such behavior among employees, therefore, increases their levels of intrinsic motivation and cognitive flexibility, both of which are a pre-requisite for creative ideation (Meyer, 2024). Additionally, research indicates that creative thinking is a bridge between social influence and innovation, allowing the collective insights of collaboration to be translated into actionable outcomes (Wang et al., 2024). Empirical studies also reveal that prosocially oriented individuals are more likely to engage in perspective-taking and empathetic reasoning, thereby improving their creative problem-solving abilities (Lau et al., 2024). In view of the documented interplay between prosociality, creative thinking, and innovation, the hypothesis here is that creative thinking mediates the relationship between prosocial actions and innovative behavior (Khattak & Irshad, 2024). This hypothesis draws support from the understanding that, although prosocial actions provide a background for teamwork and positive working environments, through creative thinking, such interactions become a source of innovative output. Encouraging knowledge sharing and collective brainstorming, which are essential for creativity, is part of prosocial behavior (Fu & Zhang, 2024). When creative ideas are developed, they can be promoted and implemented and hence appear as innovative behavior (De Clercq & Belausteguigoitia, 2024). Thus, creative thinking mediates the connection between social and emotional benefits from prosociality and practical outcomes from innovation. This pathway shows a dual importance of prosocial action and creative thinking to realize sustained innovation in organizations.

H3. Creative thinking significantly mediates the relationship of prosocial actions and the innovative behavior.

Coping humor has been defined as the utilization of humor to cope with stress and enhance psychological resilience, a factor that has been noted to influence workplace dynamics and outcomes (Khattak & Irshad, 2024). It is

revealed that people who use coping humor are better at managing the tough situations that help the workplace be positive and adaptable (Wang et al., 2024). The research indicates that coping humour positively enhances emotional well-being while lowering interpersonal tension and enhancing social bonds all those things that lead towards high collaboration and openness for innovation (Sakaryalı et al., 2024). Furthermore, various workplace humor studies have documented how humor can reduce effects of stress and pressure, such that employees are able to concentrate and remain creative despite heavy pressures (Kapoor, 2024). For instance, empirical evidence reveals that humor provides a safety net psychologically for teams where members feel free to raise ideas and take risks with no fear of judgment (Gao et al., 2024). This is consistent with results that humor enhances innovative behavior positively by improving team cohesion as well as eliminating barriers of communication. Using this evidence, the hypothesis is that coping humor highly moderates the relationship between prosocial actions and innovative behavior (Sharma & Dhar, 2024). While prosocial behavior promotes a friendly and cooperative environment, coping humor can enhance these effects by diffusing tension and creating a relaxed atmosphere in which innovation can thrive (Fu & Zhang, 2024). Employees who exhibit prosocial behavior and humor are more likely to engage in positive interactions, further enhancing trust and mutual support within teams (J. W. Zhang et al., 2024). This synergy creates an effect wherein the emotional upliftment from humor enhances the collaborative benefits of prosocial actions, leading to higher levels of innovative behavior (González Moreno & Molero Jurado, 2023). Furthermore, coping humor can serve as a buffer against workplace stressors, which would ensure that prosocial employees remain motivated and focused on innovation despite the challenges (Segundo-Marcos et al., 2023). Thus, the moderating role of coping humor implies an ability to reinforce this relation between prosocial behavior and innovation, thereby adding up as a necessary mediator toward creative and innovative results.

H4. Coping humor significantly moderates the relationship of prosocial actions and the innovative behavior.

It has been researched in great detail about how coping humor impacts cognitive processes, specifically by enhancing creative thinking (Da Costa Dutra et al., 2023; Kaimal et al., 2023). As a cognitive activity, humor relies on the perception of incongruity and the ability to make unrelated ideas converge, which are directly in line with creative thinking (Rojas et al., 2023). Studies have

shown that coping humor increases divergent thinking, which is the kind of thinking that generates novel yet useful ideas. It is also found to reduce cognitive rigidity that enables one to tackle a problem from several angles (Kaimal et al., 2023). Further studies reveal that it helps raise mood and reduce stress levels, both of which are stimulating creativity. For example, findings show that humorous people engage in creative imagination and exploratory thought much more frequently than those with poor humor (Press & Erel, 2023; Xing, 2023). Humor will also bring about positive social interaction through which individuals feel free to build on one another's ideas by sharing their thoughts. Given the cognitive and social benefits of humor, it is hypothesized that coping humor does significantly moderate the relationship between prosocial actions and creative thinking (Rodrigues et al., 2023). The prosocial action, even though it fostered cooperation and trust, will be amplified by coping humor that also creates an emotionally uplifting and a cognitively stimulating context (Maun et al., 2023). Employees who use humor as a coping mechanism are more likely to approach a creative task with optimism and flexibility, magnifying the favorable effects of prosocial behaviors. Humor can also spur risk-taking in idea generation since it eliminates fear of failure or criticism (Wang, 2023). This moderating role of humor therefore implies that its integration with prosociality can lead to more heightened levels of creativity as it allows individuals to capitalize on social and emotional resources better (Dai et al., 2023). Coping humor bridging the emotional and cognitive spaces by strengthening the impact that prosocial actions may have on creative thinking highlights its role in organizational innovation.

H5. Coping humor significantly moderates the relationship of prosocial actions and the creative thinking.

Theoretical Justification

This research will be theoretically anchored in the broaden-and-build theory and the interactionist model of innovation, combining to give very robust explanatory power for the relationships and model under study. Broaden-and-build theory basically suggests that positive emotions, which include those engendered by prosocial actions and coping humor, broaden individuals' cognitive and social resources in ways that make them ready to explore novel ideas and also engage in creative problem-solving processes (De Clercq & Belausteguigoitia, 2024). These positive affective states not only

positively contribute to creative thinking but also feed into upward spirals of resource building that supports innovative behavior in the long term (Pedrazzini et al., 2024). Prosocial acts-the voluntary behaviors whose direct goals are to improve the conditions of others-generally engender favorable emotional environments characterized by trust and cooperation-the foundations upon which innovation stands (Mumtaz, 2024). In a similar way, coping humor serves as a psychological mechanism that reduces stress and creates an emotionally resilient work environment, which enhances employees' divergent thinking ability and innovation in the application of new solutions (Pathak & Jha, 2024). The interactionist model of innovation supports this view by suggesting that innovation is the result of the interaction between individual characteristics, social factors, and organizational conditions (J. Zhang et al., 2024). This model underlines the synergistic effects of prosocial actions and humor in creating environments where creative thinking flourishes, thus serving as a mediating mechanism that transforms social behaviors into actionable innovation. Additionally, theories of emotional contagion and social capital enrich this framework by explaining how positive behaviors and emotions propagate within teams, thereby amplifying their collective capacity for innovation (Tang et al., 2024). These theoretical perspectives not only provide a coherent basis for understanding the direct, mediated, and moderated relationships proposed in this study but also highlight practical implications of fostering prosociality and humor as drivers of workplace creativity and innovation.

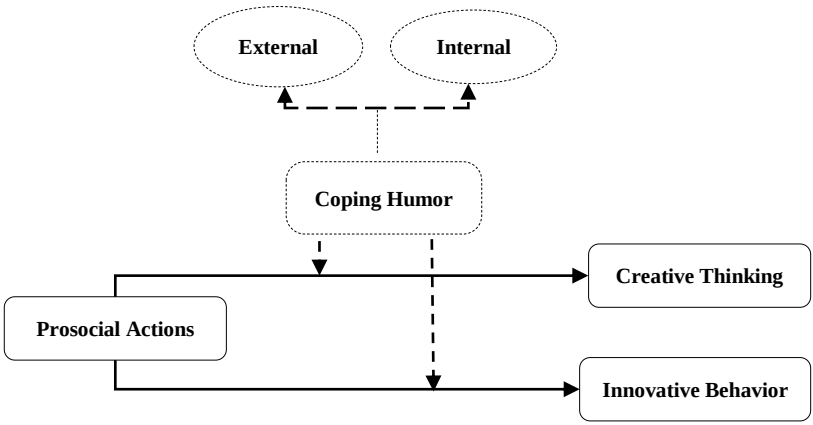

Figure 1: Theoretical Model

Methodology

Research Design

The present study employed a quantitative research design in order to investigate the relationship between prosocial actions, coping humor, creative thinking, and innovative behavior. This research was conducted in the Kingdom of Saudi Arabia. The sample used consisted of employees working in firms across different departments. The research design was adopted for ensuring the collection of data from a diverse and representative sample that would enable a more robust understanding of the constructs under investigation. The cross-sectional survey method was used, and the participants were given structured questionnaires to elicit responses from them regarding the variables of interest.

Sample and Population

Population in the study comprised the employees working in different departments of firms in Saudi Arabia. There were 303 employees who participated in the survey and included all types of jobs and sectors. The sample size was determined based on established guidelines for partial least squares structural equation modeling (PLS-SEM), which recommend a minimum of 10 times the largest number of structural paths directed at a latent variable in the model. The diverse composition of the sample ensured the generalizability of the findings within the context of Saudi organizations. The sampling technique was convenience sampling. The participants were selected to be easily accessible and also ensure that different departments of the organizations are well represented.

Instrumentation

The measurement scales (Table 1) for all the variables were borrowed from already established research works. Thus, ensuring validity and reliability. The prosocial action was measured using a scale that included items to assess the employee's altruistic and cooperative behavior in the workplace. Coping humor was measured using a multi-dimensional scale, capturing external (observable) and internal (personal) humor. Creative thinking was assessed through items that capture participants' ability to come up with new ideas and solutions. Innovative behavior, on the other hand, was measured through a scale focused on putting creative ideas into practical outcome. Every item was

rated on a five-point Likert scale, ranging from 1 for strongly disagreeing to 5 for strongly agreeing.

Table 1

Instrumentation

Variable	Items	Source
Innovative behavior	Searches out new technologies, processes, techniques, and/or product ideas. Generates creative ideas. Promotes and champions ideas to others. Investigates and secures funds needed to implement new ideas. Develops adequate plans and schedules for the implementation of new ideas. Is innovative."	(Scott & Bruce, 1994)
Prosocial actions	I am pleased to help my friends/colleagues in their activities. I share the things that I have with my friends. I try to help others. I am available for volunteer activities to help those who are in need. I help immediately those who are in need. I do what I can to help others avoid getting into trouble. I am willing to make my knowledge and abilities available to others. I try to console those who are sad. I easily lend money or other things. I try to be close to and take care of those who are in need. I easily share with friends any good opportunity that comes to me. I spend time with those friends who feel lonely.	(Luengo Kanacri et al., 2021)
Creative thinking	Being able to involve oneself in tasks although the answer and solution has not yet to be found. Trying hard to expand skills and knowledge. Creating new ways or point of view outside the common knowledge.	(Hidayati & Idris, 2020)
Coping humor	Internal People expect me to say amusing things. I can crack people up with the things I say. I often come-up with witty comments. I am good at thinking-up jokes or funny stories. People tell me that I am quick-witted. I often feel the need to make other people laugh. External I am a connoisseur of humor. I prefer situations where people are free to express their senses of humor. I enjoy being with people who tell jokes or funny stories. I often read jokes and funny stories. I enjoy being around quick-witted people. I need to be with people who have a sense of humor.	(Picard & Blanc, 2013)

Data Collection

Data were collected using a structured questionnaire that is both online and in-person distribution to maximize reach. There were clear instructions provided to all participants, and they assured that their responses would be kept confidential. The questionnaire was as short and user-friendly as possible

in order to take about 10–15 minutes in total. Responses were screened closely for completeness and accuracy leading to a final dataset with 303 valid responses.

Data Analysis

The data were analyzed using Partial Least Squares Structural Equation Modeling, with software SmartPLS. Robustness in this method applies to the evaluation of highly complex models with multiple constructs and efficient handling of samples of rather small sizes. The research was structured into two analyses: analysis of the measurement model, and analysis of the structural model. The research assessed reliability, validity including convergent and discriminant validity as well as indicator loadings for the measurement model. The structural model was analyzed to check the hypothesized relationships by the path coefficients, significance level, and R-squared of the dependent variables. Besides, mediation and moderation effects were further checked through bootstrapping techniques with 5,000 subsamples to ensure the robustness of the results.

Statistical Justification

The PLS-SEM was more than appropriate for this study as it focuses on the prediction-oriented models and has the capacity to analyze complex relationships that include mediators and moderators. Additionally, the method was apt for the study because it could handle the distribution of data not normally distributed; the participants' responses might vary in many ways. The PLS-SEM application has offered theoretical insights as well as action-oriented recommendations to improve organizational innovation.

Results

Table 2. A more detailed evaluation of the measurement model is shown with emphasis on reliability and validity of the constructs involved. Reliability metrics are all confirmed.

Cronbach's alpha (α), rho_A, and composite reliability, for all variables, and the Average Variance Extracted (AVE) assesses convergent validity. For coping humor, external has acceptable loadings by most indicators ranging from 0.543 to 0.758 with Cronbach's Alpha at 0.781 and composite reliability at 0.845. At AVE of 0.548, it proves above the threshold of.5, which shows adequacy in convergent validity. Similarly, the same can be said for its internal dimension,

where items range from 0.722 to 0.808, with Cronbach's Alpha at 0.855 and composite reliability 0.892. Its AVE of 0.580 further supports the reliability and validity of this subdimension. For creative thinking, indicator loadings range between 0.723 to 0.796 and thus confirm that each of the measurement items contributes meaningfully to the construct. Although individual reliability values are strong, overall reliability and validity indices were not presented but are implicitly acceptable based on loadings.

Table 2

Variables reliability, Validity, and Measurement Items Fitness Statistics

Variable		Indicator	Loading	Cronbach's alpha(α)	rho_A	Composite Reliability	Average variance extracted
Coping Humor	External	CHE1	0.734	0.781	0.796	0.845	0.548
		CHE2	0.758				
		CHE3	0.694				
		CHE4	0.685				
		CHE5	0.715				
		CHE6	0.543				
	Internal	CHI1	0.722	0.855	0.855	0.892	0.580
		CHI2	0.742				
		CHI3	0.789				
		CHI4	0.766				
		CHI5	0.739				
		CHI6	0.808				
Creative thinking		CT1	0.796				
		CT2	0.763				
		CT3	0.723				
Innovative behavior		IB1	0.846	0.838	0.848	0.883	0.560
		IB2	0.819				
		IB3	0.804				
		IB4	0.714				
		IB5	0.584				
		IB6	0.692				
Prosocial actions		PA1	0.763	0.904	0.907	0.920	0.591
		PA10	0.765				
		PA11	0.718				
		PA12	0.770				
		PA2	0.684				
		PA3	0.658				
		PA4	0.528				
		PA5	0.697				
		PA6	0.705				
		PA7	0.687				
		PA8	0.704				
		PA9	0.696				

For innovative behavior, the internal consistency of the construct is very high as its Cronbach's alpha is 0.838 and composite reliability is 0.883. Its AVE of 0.560 suggests that the variance captured by the indicators collectively is

good. The individual loadings are between 0.584 and 0.846, so individual contributions are moderate to high except that IB5 contributes a bit less. Finally, prosocial behavior indicates reliability to a great extent, since Cronbach's alpha is 0.904, rho_A is 0.907, and composite reliability is 0.920. AVE is 0.591, which crosses the minimum threshold, therefore it provides adequate convergent validity. The indicator loadings vary from 0.528 to 0.770, which indicates the high construct alignment, although the loading of PA4 is only 0.528, which may be needed to be refined or reconsidered.

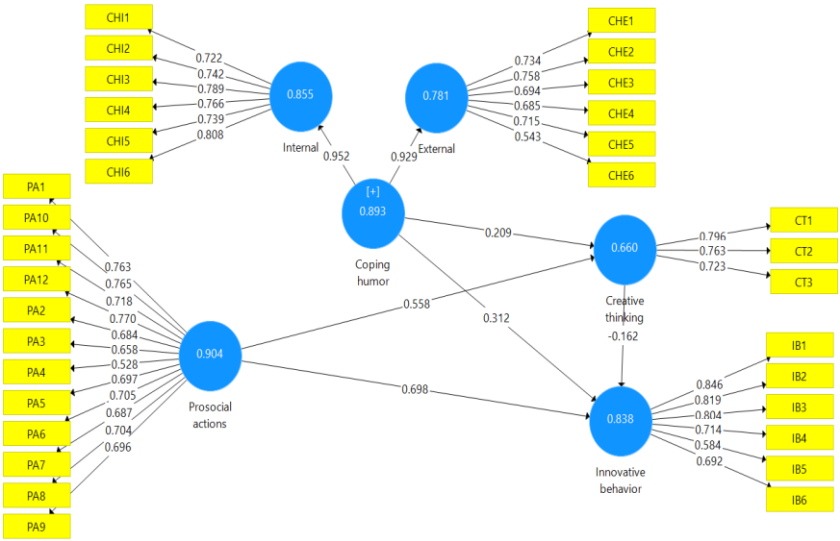

Figure 2: Estimated Model

Table 3 Heterotrait-Monotrait (HTMT) ratio and Fornell-Larcker criteria are used to assess the discriminant validity of the constructs. HTMT values show that all constructs maintain discriminant validity because none of them cross the threshold of 0.85 for distinctiveness. For instance, coping humor and creative thinking have an HTMT of 0.814, which means that there is a high yet acceptable correlation. Similarly, the link between internal coping humor and prosocial acts, with an HTMT of 0.825, indicates robust but not overlapping construct boundaries. Fornell-Larcker criterion confirms discriminant validity because for each construct, the square root of the AVE is greater than the correlation between constructs. For example, coping humor's diagonal value of 0.683 is greater than its correlations with other constructs like creative thinking (0.656) and innovative behavior (0.764). The same pattern continues with all the constructs, and hence they are said to measure unique dimensions within

the model.

Table 3

Discriminant Validity

Heterotrait-Monotrait Ratio of Correlations (HTMT)						
Construct	1	2	3	4	5	6
Coping humor						
Creative thinking	0.814					
External	0.809	0.731				
Innovative behavior	0.789	0.690	0.827			
Internal	0.796	0.848	0.809	0.808		
Prosocial actions	0.688	0.873	0.813	0.755	0.825	
Fornell-Larcker Criterion						
Coping humor	0.683					
Creative thinking	0.656	0.761				
External	0.929	0.574	0.692			
Innovative behavior	0.764	0.549	0.757	0.749		
Internal	0.952	0.653	0.771	0.685	0.761	
Prosocial actions	0.801	0.726	0.778	0.830	0.732	0.701

Table 4 shows the goodness-of-fit indices and examines the explanatory and predictive power of the model. R-squared values show how much variance in the dependent variables is explained by the model. Creative thinking (R^2 = 0.542) and innovative behavior (R^2 = 0.729) indicate that prosocial actions and coping humor contribute significantly to these outcomes. The internal dimension of coping humor shows the highest R^2 (0.906), suggesting substantial explanatory power in this framework. F-square values further point out the effect sizes of predictors. Coping humor showed high values on internal coping humor F^2 = 9.589 and external coping humor F^2 = 6.324. Prosocial actions, on the other hand, show a weak influence on creative thinking with F^2 = 0.244, yet showed higher influence on innovative behavior with F^2 = 0.517.

Table 4

Model Goodness of Fit Statistics

R-Squared			Model Fit		
Construct	Coefficient of determination (R2)	Adjusted R2	Q^2predict	RMSE	MAE
			0.781	0.041	0.061
Creative thinking	0.542	0.538			
External	0.863	0.863			
Innovative behavior	0.729	0.725			
Internal	0.906	0.905			
F-Square					
	Creative thinking	External	Innovative behavior	Internal	
Coping humor	0.034	6.324	0.124	9.589	
Creative thinking			0.045		
Prosocial actions	0.244		0.517		

Additionally, creative thinking showed less yet significant influence on innovative behavior with $F^2 = 0.045$. Predictive relevance measures like Q^2 predict ascertain that the model has predicative value. For example, positive Q^2 scores for the dependent constructs point to positive contributions that only add to the robustness of the model. From the fit statistics, this model has good RMSE and MAE values, wherein the predictions closely approximate results.

Table 5 presents the results of hypothesis testing. As presented, all pathways were statistically significant. Prosocial behavior is significantly related to innovative behavior ($\beta = 0.698$, $p < 0.001$). This shows that altruistic and cooperative behaviors are direct antecedents to innovation. It aligns with theories stating that social and emotional factors are enhancing the creativity of organizations. Prosocial actions significantly influence creative thinking ($\beta = 0.558$, $p < 0.001$), underscoring their capacity to promote cognitive flexibility and ideation, critical for innovation. Creative thinking mediates the relationship between prosocial actions and innovative behavior ($\beta = -0.091$, $p = 0.038$). Despite the slightly weaker coefficient, the statistical significance highlights creative thinking as a vital mechanism that translates prosociality into actionable innovation.

Table 5

Path Analysis

Hypothesis	Coefficients	Standard Errors	t-values	p-values
Prosocial actions significantly influence the innovative behavior.	0.698	0.702	7.379	<0.001
Prosocial actions significantly influence the creative thinking.	0.558	0.562	5.909	<0.001
Creative thinking significantly mediates the relationship of prosocial actions and the innovative behavior.	-0.091	-0.087	1.773	0.038
Coping humor significantly moderates the relationship of prosocial actions and the innovative behavior.	0.437	0.489	2.203	<0.001
Coping humor significantly moderates the relationship of prosocial actions and the creative thinking.	0.539	0.557	2.368	<0.001

Coping humor moderates the relationship between prosocial actions and innovative behavior: $\beta = 0.437$, $p < .001$. This means that humor plays a role in making prosocial behaviors influential in innovation. Coping humor moderates the relationship between prosocial actions and creative thinking: $\beta = 0.539$, $p < .001$; this means that humor serves to amplify the cognitive advantages derived from prosocial interaction as it promotes greater creativity. Acceptance of each hypothesis indicates theoretical and practical significance for the proposed model, thereby evidencing the complex dynamics

surrounding prosociality, creativity, and innovation in the organizational context.

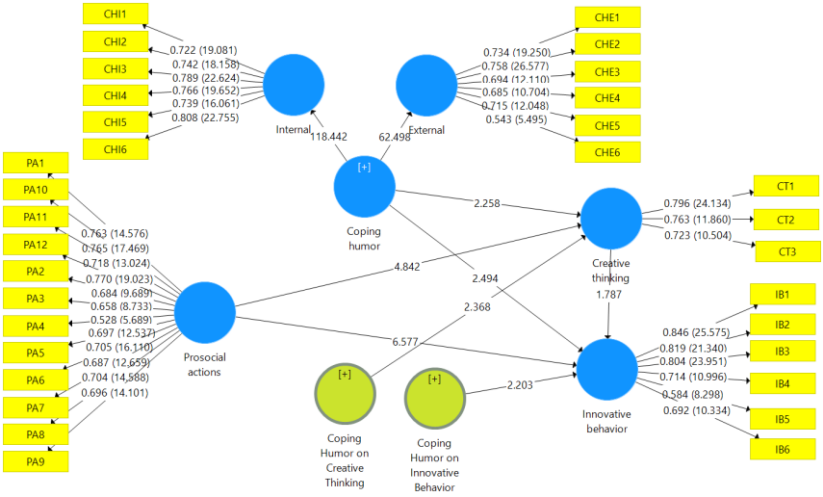

Figure 3: Structural Model for Path Analysis

Discussion

In the current dynamic and competitive scenario, innovation has turned into an indispensable catalyst for organizational growth. This is not only because it changes individual and team outcomes but also changes workplace culture. The complex interactions between prosocial behaviors, creative thinking, and innovative capacities therefore unravel these relationships in detail as pro-social actions and coping humor turn out to be significant psychological and social machinery behind creativity and innovation. Anchored on the theoretical perspectives of broaden-and-build theory and the interactionist model of innovation, this study further pushes the current understanding of the dynamics of the workplace by empirically testing the direct, mediated, and moderated relationships between the constructs. By filling gaps in literature and investigating unexplored empirical frontiers, the findings of this research set an agenda for organizations to design interventions that will foster a collaborative, creative, and resilient culture.

This study affirms the substantial influence of prosocial actions on innovative behavior while strengthening new dimensions of previous literature in this discussion. Prosocial behaviors, which define actions taken by an individual in the voluntary intent to further others' welfare, develop mutual

respect, trust, and psychological safety in teams in relation to innovation. These behaviors form a favorable emotional context where the employee is allowed to express ideas, try, and take risks-all those that lead to innovation underlined by the broaden-and-build theory (Meyer, 2024). Empirical evidence based on previous studies, for instance, Lau et al. (2024), supports this argument since prosocially oriented employees are likely to make collective gains ahead of their individual gains. Again, it relates altruistic motivations to the role of catalysts in innovation, particularly in collaboration environments where collective intelligence is allowed to bloom.

The study also proved that prosocial actions significantly influence creative thinking, further validating the theoretical framework. Creative thinking, defined as the ability to generate novel and useful ideas, benefits from the supportive and empathetic environments nurtured by prosocial behaviors. Such environments encourage divergent thinking and reduce cognitive load, enabling employees to explore unconventional solutions to problems (Maun et al., 2023). The broaden-and-build theory explains this as a cascading effect where positive emotional states induced by prosocial actions expand individuals' cognitive repertoires (Da Costa Dutra et al., 2023). Empirical studies, including those by (Wang, 2023), have consistently shown that positivity facilitates cognitive flexibility, a cornerstone of creativity. In particular, this paper shows that this function of prosociality operates by activating both emotional and cognitive perspectives so as to work well for innovation in its ideation phase, as well as in the phase of putting into practice innovations created in this process.

This mediating effect of creative thinking suggests crucial mechanisms regarding the translation of prosocial actions into innovative behavior. Based on the theoretical underpinnings from the interactionist model of innovation, it seems that creativity acts as a bridge between transforming the social and emotional inputs into an actionable outcome (Segundo-Marcos et al., 2023). This research thus goes beyond earlier research since prosocial actions can provide a fertile ground for collaboration and trust, but it is creative thinking that operationalizes those dynamics into innovative behavior. The study verifies that a prosocial environment promotes creativity, leading to a more robust and sustainable innovation process. The mediating relationship therefore highlights the importance of emotional intelligence and creative facilitation in workplace practices to facilitate innovative potential.

This layer of understanding in the workplace dynamics of prosocial actions-

innovative behavior relationships is revealed by the moderating role of coping humor. Humor, in general, and especially in conditions of stress, is a coping mechanism that reduces tension, builds resilience, and strengthens social bonds. This study confirms that coping humor enhances the beneficial effects of prosocial behavior on innovation by creating a relaxed and open atmosphere where employees are free to express and experiment. Supported by the broaden-and-build theory, humor is not only relaxing but also builds cognitive and affective resources in the process; it translates prosocial action into new outcomes (Dai et al., 2023). It is confirmed by earlier findings, such as those of González Moreno and Molero Jurado (2023), as humor can be used as a tool that improves team cohesiveness and encourages more creative approaches to problem solving. This could imply that prosociality with humor is the best conditions for any innovation.

Similarly, the moderating function of coping humor in the relationship between prosocial acts and creative thinking points toward this synergistic potential between such constructs. Prosocial actions create an environment in which creativity can flourish due to the promotion of collaboration and trust, but humor gives something to the cognitive-emotive flexibility needed for divergent thinking. The interactionist model of innovation is also supporting for this view. It explains how a trait like a sense of humor influences creative outcomes by interacting with the behaviors exhibited in social settings (De Clercq & Belausteguigoitia, 2024). The findings also converge with empirical studies that humor actually lowers the fear of failure so employees would more likely take creative risks at work (González Moreno & Molero Jurado, 2023). This moderating effect emphasizes the importance of humor as a strategic organizational tool in fostering creative excellence that is balanced with prosocial values.

Combining prosocial activities with humor enables organizations to create innovative environments where innovation and creativity are not just encouraged but deeply embedded in the workplace. The findings thus necessitate a holistic approach to workplace interaction, one that encompasses emotional, cognitive, and social dimensions to truly maximize employee potential. This validation of the moderating function of coping humor also opens pathways toward practical implications, including using humorous, training-based, and team-based activities to increase both creativity and innovation at work.

Consequently, this study furnishes much-needed evidence for the major

impact of prosocial action, creative thinking, and coping humor on the production of innovation and creativity in the organization. By validating the direct, mediated and moderated relationships proposed in the model, the results provided both theoretical and practical insights on the dynamics at work. The integration of broad and build theory and the interactionist model of innovation at the same time highlighted and amplified by emotional and social mechanisms the potential for change. Beyond filling important gaps within the existing literature, these findings shed light on actionable strategies for organizations to develop a culture of creativity and innovation. The findings and implications of this research call for further investigations into prosociality, humor, and organizational innovation across different industries and cultures.

Theoretical Implications

This contribution aims toward improving the social and organizational-psychological body of knowledge for our understanding on how prosocial actions, coping humor, and creative thinking come together to work in determining innovative behavior, under an intertwined emotional-cognitive-behavioral framework, drawn from components of Social Exchange Theory and Broaden-and-Build Theory. It follows that prosocial behaviors have cognitive mediators, that such mediators are creative, and these also make the dynamics of social groups come alive into innovative outcomes, beyond the confines of mere altruistic behaviors. This explains and corroborates why prosocial behavior is indeed relevant in the workplace as a creativity source and further informs creativity models by adding another type of emotional moderator. The inclusion of coping humor as a moderator highlights its dual role in alleviating stress and enhancing interpersonal relationships, which thereby enhances the efficacy of prosocial behaviors in driving creativity and innovation. Further, it bridges the gaps that were present in the earlier literature by empirically proving the role of coping humor as multi-dimensional and the impact it makes on the cognitive as well as the behavioral outcomes. As other previous researches had focused on reducing stress by humor, this research extends the applicability in the field of innovation by portraying it as something that would further facilitate positive effects on creative thinking and innovation. This leads to a reconsideration of the old theories that have been for a long time ignoring their emotional side, challenging researchers to consider including these factors in newer models of

organizational behavior. Thus, the research provides a subtle perspective on how theoretical insights into fostering innovation in workplace environments are deepened by highlighting the interconnectedness of social, emotional, and cognitive factors.

Practical Implications

This research provides actionable recommendations for organizational leaders who want to develop a culture of innovation. In the first place, it highlights the necessity of creating prosocial behavior among the workforce. Organizations can develop policies and programs that foster teamwork and collaboration and also altruistic behaviors such as group-based rewards, mentorship programs, and team-building activities. All these activities create a support work environment where ideas can be exchanged and creative thinking fostered. In addition, managers can improve employees' coping humor through training workshops that foster positive reframing and light-hearted communication that can cushion workplace stress and enhance interpersonal dynamics, thus promoting innovative outcomes. This research provides HR and training professionals with actionable insights regarding the role of emotional and cognitive factors in driving innovation. For example, the development of intervention programs can be targeted on creative thinking skills and incorporation into leadership development programs in using coping humor techniques. There is a moderating effect of coping humor such that organizations should also take the proactivity of workplace stress in establishing an environment where there is a value for humor and emotional resilience. Furthermore, with the mediating influence of creative thinking, organizations can develop brainstorming sessions, innovation laboratories, and collaborative platforms where cognitive creativity can be stimulated and prosocial behaviors turned into practical innovations. In fact, these strategies are directed toward achieving broader goals, which include enhancing workplace satisfaction as well as sustainable growth.

Limitations and Future Research Directions

Although the results of this study are strong, there are a few limitations that should be noted. First, the data in this study were self-reported and may be subject to biases like social desirability and common method variance. Future studies can help alleviate this by using objective performance metrics or longitudinal data to validate the causal relationships proposed. Second, the

sample in this study was geographically limited and mainly drawn from a specific cultural or organizational context. Expansion of the research to other cultural and industrial settings can strengthen the generalizability of the findings and potentially discover cross-cultural differences in how prosocial actions and coping humor impact creativity and innovation. Further, this research mainly focused on the direct as well as the moderating effects of coping humor within the workplace. The study should consider other emotional and cognitive moderators, such as psychological safety, emotional intelligence, or certain styles of leadership, which will then yield an enriched comprehension of the dynamics underlying the factors of innovation. Exploring how digital tools and platforms play in prosocial actions and creative thinking may be another potential pathway in research, especially considering more dispersed or hybrid working models. This study would help in delving into further theoretical and practical relevance while opening avenues for further innovation focused interventions.

Conclusion

This research underlines the central role that prosocial actions, coping humor, and creative thinking play in driving innovative behavior within organizational settings. The study combines important theoretical insights from Social Exchange Theory and Broaden-and-Build Theory, drawing attention to the interplay of emotional, cognitive, and behavioral factors shaping workplace innovation. The results indicate that prosocial behaviors are a basis for creativity, and coping humor enhances the impact of prosocial behaviors, while creative thinking is an essential mediator. These factors together form a comprehensive model that provides both theoretical depth and practical applicability for organizations interested in enhancing their innovative capacity. Therefore, this study contributes to the academic discourse on creativity and innovation but also offers pragmatic strategies for creating a vibrant, enabling, and resilient workplace. It emphasizes the importance of the social and emotional dimensions that call for organizations to shift from the traditional approach to innovation, where employee well-being, collaboration, and creativity become paramount. Future studies and practice must continue to pursue and refine these connections with innovation nurtured in a way that is inclusive, sustainable, and adaptable to the dynamic demands of the modern workplace.

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