Factors influencing the motivation to participate in volunteer activities among students of Tan Trao University, Vietnam

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Abstract

In the context of volunteer activities playing an increasingly important role in developing skills and social responsibility among university students, this study developed a model consisting of five independent factors, including: personal intrinsic motivation, influence from others, institutional encouragement, skill development, and achievements and career opportunities—which influence the motivation to participate in volunteer activities among students at Tan Trao University. A mixed-methods research approach was applied, based on data collected from 1,075 students. Analyses were conducted using SPSS 26.0, including Cronbach's Alpha reliability testing, Exploratory Factor Analysis (EFA), Pearson correlation, and linear regression. The results show that all five factors have a positive and statistically significant impact on students' decisions to engage in volunteer activities. Among them, skill development was identified as the most influential factor. Based on these findings, the study proposes a number of solutions for universities to better attract and encourage student participation in volunteer programs—not only to foster their personal growth but also to promote positive contributions to the community.

Keywords: Factors, motivation, volunteer activities, students, Tan Trao University, Vietnam.

1. Introduction

Volunteer activities are playing an increasingly important role in nurturing social responsibility, civic engagement, and personal development among university students. Participation in volunteer work not only contributes to the well-being of communities but also enhances students' soft skills, empathy, and sense of connection to society (Wilson, 2012; Handy et al., 2010). In the context of higher education in Vietnam, promoting student involvement in volunteer activities aligns with the university's mission of training well-rounded, socially responsible, and community-oriented citizens.

However, despite the implementation of various programs and initiatives, the level of student participation in voluntary activities remains highly uneven. Therefore, understanding the motivational factors that either encourage or hinder students' engagement is essential for developing more effective strategies to foster active participation. These motivations may originate from a variety of sources, including intrinsic factors such as personal values and altruism, or extrinsic influences such as social recognition, academic benefits, or peer pressure (Clary et al., 1998; Deci & Ryan, 2000).

Tan Trao University is a local public university under the administration of the People's Committee of Tuyen Quang Province, located in the northern mountainous region of Vietnam. The university currently has nearly 4,000 students enrolled across various disciplines, with a focus on teacher training. Participation in voluntary activities not only helps students cultivate moral ideals and develop essential skills, but is also particularly aligned with the values expected of future educators.

This study aims to explore and analyze the key factors influencing students' motivation to participate in voluntary activities at Tan Trao University. By identifying these factors, the research seeks to provide useful insights that can assist educational institutions and youth organizations in designing more appropriate programs to support and inspire student volunteers, thereby contributing to the development of a sustainable culture of community service within the higher education environment.

2. Literature review

Recent studies have highlighted various factors influencing university students' motivation to participate in volunteer activities.

Understanding the motivations behind student volunteerism is pivotal for fostering engagement. The volunteer functions inventory by Clary et al. (1998) identifies six primary motivations: values (altruism), understanding (learning), social (relationships), career (professional advancement), protective (reducing guilt), and enhancement (personal growth). This framework has been widely adopted to assess volunteer motivations across diverse contexts. Complementing the volunteer functions inventory, Self-Determination theory posits that motivation exists on a continuum from intrinsic (driven by personal interest) to extrinsic (driven by external rewards). This theory emphasizes the fulfillment of three basic psychological needs—autonomy, competence, and relatedness—as essential for intrinsic motivation (Deci & Ryan, 2000). Research indicates that students often engage in volunteer activities due to a combination of intrinsic and extrinsic factors. Intrinsic motivations include personal values, a desire for self-improvement, and the satisfaction derived from helping others (Clary et al., 1998). Extrinsic motivations encompass career advancement, academic requirements, and social recognition (Handy et al., 2010). A study by Liu (2009) highlighted that students' awareness of volunteer services significantly influences their participation, suggesting that both intrinsic values and extrinsic incentives play roles in motivating student volunteers.

In the Vietnamese context, cultural norms and educational structures influence student volunteerism. A study focusing on Vietnamese healthcare students found that over 70% were willing to volunteer during the COVID-19 pandemic, primarily motivated by a sense of duty and community responsibility (Nguyen et al., 2021). This underscores the role of cultural values in shaping volunteer motivations. At Tan Trao University, located in a mountainous region of Vietnam, students, particularly those in teacher training programs, may be influenced by both cultural expectations and professional aspirations to engage in volunteer activities.

Despite the recognized benefits, several barriers hinder student participation in volunteer activities. Time constraints, academic pressures, and a lack of awareness about opportunities are commonly cited obstacles (Holdsworth & Quinn, 2010). Additionally, if volunteer activities are not perceived as relevant to students' academic or career goals, motivation to participate may diminish.

According to Do Van Huan et al. (2023), external influences such as family, friends, and community play a significant role. Students are more inclined to engage in volunteer work if they observe positive participation from their peers, relatives, or influential individuals. Moreover, encouragement and support from the university and faculty members are crucial in promoting such behaviors. Nguyen Thi Te (2023) emphasizes that volunteering aids students in developing essential skills, including teamwork, communication, time management, and critical thinking. Active participation also enhances students' résumés, providing advantages in future job applications. Altruism, a desire to assist the community, and the pursuit of life's meaning are primary motivators for youth involvement in volunteer activities. Notably, individuals with a high sense of social responsibility often volunteer without external incentives (Vo Trong Dinh, 2020). Additionally, students are more likely to participate in volunteer activities if the organizing body has effective management systems, clear programs, financial support, flexible scheduling, and ensures volunteer safety (Dang Thi Huong, 2017).

Understanding the multifaceted motivations and barriers to student volunteerism is crucial for institutions like Tan Trao University. By aligning volunteer opportunities with students' academic programs and career aspirations, and by fostering a culture that values community engagement, the university can enhance student participation in volunteer activities.

3. Concepst And Research Methodology

3.1. Concepts and research model

Motivation is a fundamental psychological process that, alongside cognition, personality, attitude, and learning, plays a crucial role in influencing human behavior. It represents an internal force within individuals—comprising energy, enthusiasm, passion, and aspirations—that drives them to act and persist toward achieving specific goals (Tella, 2007).

According to Wikipedia, "volunteering" refers to the voluntary activities of individuals or groups who freely dedicate their time and labor to serve the community. Student volunteers are those who possess compassion, self-awareness, and a spirit of volunteerism, participating in youth and student volunteer teams, willingly undertaking challenging and arduous tasks without necessarily expecting material benefits for themselves.

Volunteering is defined as "any activity in which time is given freely to benefit another person, group, or cause" (Wilson, 2000, p. 215). Cnaan et al. (1996) identify four key dimensions common to most definitions of volunteer work:, including: Free will- The individual chooses to volunteer without coercion; Lack of remuneration- The volunteer does not receive financial compensation; Structure- The activity is conducted within an organizational context.; and Beneficiaries- The activity benefits others beyond the volunteer's immediate family. From a legal standpoint, volunteering is characterized as unpaid work performed for public or charitable reasons, without the expectation of compensation, and not replacing paid labor (Overgaard & Kerlin, 2022). In Vietnam, volunteer activities are significant initiatives launched by the Central Committee of the Ho Chi Minh Communist Youth Union since 1994. These activities enable young people to contribute their youth, intellect, and enthusiasm to the nation's socio-economic development, poverty alleviation, rural development, urban civilization, traffic safety, environmental protection, and more. Volunteer activities are characterized by three fundamental features: respecting the voluntariness of participants, bringing positive benefits and outcomes to the community, and not aiming for personal economic gain. Volunteering encompasses a range of activities, from formal service programs to informal helping behaviors, all characterized by the voluntary nature of participation and the absence of financial compensation (Salamon & Sokolowski, 2016).

Clary et al. (1998) developed the Volunteer Functions Inventory (VFI), identifying six primary motivations for volunteering. They are: (1) *Values:* Expressing altruistic and humanitarian concerns. (2) *Understanding*: Gaining knowledge and skills. (3) *Enhancement:* Personal growth and self-esteem. (4) *Career*: Gaining career-related experience. (5) Social: Strengthening social relationships. (6) *Protective:* Reducing negative feelings or addressing personal problems.

Foundational theories concerning human needs and behavior provide a robust framework for proposing a research model on the factors influencing student participation in volunteer activities at Tan Trao University. Notable theories include: (1) Hierarchy of needs theory by Abraham Maslow's (1943) posits that human needs are arranged in a hierarchical order, where the fulfillment of lower-level needs is a prerequisite for addressing higher-level needs. The five levels are: Physiological needs- Basic necessities such as food, water, and shelter; Safety needs- Security and protection from harm. Social needs- Love, affection, and belongingness; Esteem needs- Self-respect, recognition, and achievement; and Self-Actualization- Realizing personal potential and self-fulfillment. (2) The theory of reasoned action, developed by Fishbein and Ajzen (1975), suggests that an individual's behavioral intentions are the primary predictors of actual behavior. These intentions are influenced by two factors: Attitude toward the behavior-The individual's positive or negative evaluation of performing the behavior; and Subjective norms- The perceived social pressure to perform or not perform the behavior. (3) Self-Determination Theory (SDT) developed by Deci and Ryan, emphasizes the role of intrinsic and extrinsic motivations in human behavior. It suggests that fulfilling needs for autonomy, competence, and relatedness enhances motivation, which can be applied to understand volunteerism among students. (4) Theory of planned behavior (TPB): An extension of the Theory of Reasoned Action, TPB by Ajzen incorporates perceived behavioral control into the model, alongside attitudes and subjective norms. This theory can help predict students' intentions to engage in volunteer activities based on their attitudes, perceived social pressures, and control over the behavior. (5) David McClelland identified three primary motivators: the need for achievement, affiliation, and power. These needs can influence students' decisions to participate in volunteer work, depending on which need is most dominant. By integrating these theories, researchers can develop a comprehensive model to examine and understand the various factors that motivate students at Tan Trao University to engage in volunteer activities.

Based on the concepts, theoretical overviews, and related studies, the author proposes a research model consisting of five independent factors influencing the dependent factor—students' decision to participate in volunteer activities at Tan Trao University. The independent variables include: Influence from others, Skill development, Achievements and career opportunities, Personal intrinsic motivation, and Institutional encouragement (Figure 1). The corresponding hypotheses of the model are proposed under the assumption that all independent factors have a positive effect on the dependent variable (a total of five hypotheses).



Figure 1. Proposed research model

3.2. Research methodology

This study employs a mixed-methods approach, combining both qualitative and quantitative methods. The qualitative method was used to develop the questionnaire and measurement scales for the variables in the research model. Subsequently, the quantitative method was applied to analyze the survey data collected from students at Tan Trao University regarding their participation in volunteer activities.

The survey consisted of a total of 30 questions designed to collect data using a 5-point Likert scale (ranging from 1 to 5, corresponding to "Strongly disagree" to "Strongly agree"). The data collection period spanned from January 2025 to March 2025, yielding 1,075 valid responses. The collected responses were entered into SPSS 26.0 for processing and analysis, which served as the basis for discussions and proposed recommendations.

4. Results And Discussion

The authors coded the variables in the model to facilitate data analysis using SPSS 26.0 software: Motivation to participate in volunteer activities among students of Tan Trao University (MVA), Personal intrinsic motivation (PI), Influence from others (IO), Institutional encouragement (IE), Skill development (SD), Achievements and career opportunities (AC). The survey collected 1,075 valid responses from students studying at Tan Trao University. The sample characteristics are described in Table 1 below.

Category & Characteristics	PI	ΙΟ	IE	SD	AC
Gender					
Male	4.17	3.95	3.87	4.32	4.31
Female	4.19	4.16	4.24	4.34	4.25
Age					
18-20 years old	4.14	4.28	4.22	4.02	4.23
21 - 23 years old	4.20	4.25	4.34	4.26	4.24
24 - 26 years old	4.18	4.21	4.23	3.98	4.22
Over 26 years old	4.15	3.65	4.29	4.13	4.18
Training Major					
Education	4.20	4.26	4.22	4.11	4.26
Information Technology	4.19	4.32	4.24	4.20	4.23
Economics and Accounting	4.02	4.15	4.18	4.29	4.26
Agriculture – Forestry – Fisheries	4.10	4.20	4.21	4.31	4.08
Culture – Tourism	4.22	4.21	4.15	4.22	4.34
Medicine – Pharmacy	4.35	4.42	4.25	4.19	4.31
Others	4.28	4.20	4.13	4.30	4.33
Marital Status					
Single	4.62	4.62	4.40	4.38	4.17
Married	4.25	4.33	4.22	4.25	4.34
Frequency of Participation in Volunteer activities					
Never	3.61	4.08	4.11	3.92	3.35
Rarely	3.98	4.21	4.15	4.02	4.18
Occasionally	4.31	4.24	4.12	4.35	4.31
Frequently	4.08	4.51	4.23	4.19	4.05
Actively	4.28	4.35	4.24	4.34	4.40

Table 1: Sample description

Table 1 show that the sample comprised students of diverse demographics, academic disciplines, and levels of volunteer engagement. In terms of gender, both male and female students were represented relatively equally. Female students showed slightly higher average scores across most motivational dimensions, particularly in Institutional Encouragement (IE) and Skill Development (SD). Regarding age, the majority of respondents were between 18 and 23 years old, with this group displaying higher levels of influence from others (IO) and achievements and career opportunities (AC). Students over 26 had a slightly lower score in IO, suggesting lesser peer influence. Across different majors, students from Medicine – Pharmacy and Culture – Tourism exhibited the highest levels of motivation across several dimensions, while students in Economics and Accounting scored slightly lower in Personal Intrinsic Motivation (PI). When analyzing marital status, single students recorded higher average scores in PI, IO, and IE, suggesting that unmarried students may have more time, flexibility, or enthusiasm for volunteering. Lastly, the level of volunteer participation strongly correlated with higher motivation scores. Students who reported active and frequent participation consistently showed the highest scores across all five motivational dimensions, indicating a positive link between engagement and perceived personal or institutional benefits.

To ensure the internal consistency of the measurement, the study employed Cronbach's Alpha to assess the reliability of each measurement. According to Hair et al. (2010) and Nunnally & Bernstein (1994), a scale is considered reliable when Cronbach's Alpha coefficient is ≥ 0.7 . Specifically: Cronbach's Alpha ≥ 0.9 is considered excellent; $0.8 \leq$ Cronbach's Alpha < 0.9 is good; and $0.7 \leq$ Cronbach's Alpha < 0.8 is acceptable. In addition, the Corrected Item-Total Correlation for each item should be ≥ 0.3 . The reliability testing results of the scales are presented in Table 2 below.

Table 2: Reliability of measureme

Factors	Number of Items	Cronbach's Alpha
Personal Intrinsic Motivation (PI)	5	0.826
Influence from Others (IO)	4	0.739
Skill Development (SD)	6	0.759
Achievements and Career Opportunities (AC)	5	0.805
Institutional Encouragement (IE)	5	0.816
Participation in Volunteer Activities (PVA)	5	0.769

The Cronbach's Alpha coefficients for six key factors measured in the study, each representing a construct related to students' motivation and decision to participate in volunteer activities at Tan Trao University. All six factors demonstrate acceptable to high internal consistency, with Cronbach's Alpha values ranging from 0.739 to 0.826. This confirms that the measurement scales used in the study are reliable and suitable for further analysis such as regression, or factor analysis.

	Factors						
	1	2	3	4	5	6	
PI2	.821						
PI1	.819						
PI4	.819						
PI3	.818						
PI5	.817						
AC2							
IE4		.773					
IE1		.760					
IE2		.714					
IE5		.713					
IE3		.709					
IE2		702					
SD2			.801				
SD1			.796				
SD3			.795				
SD6			.785				
SD4			.773				
SD5			.771				
AC3				.752			
AC1				.747			
AC5				.742			
AC4				.735			
IO3					.765		
IO1					.764		
IO4					.745		
IO2					.738		
PVA5						.737	

 Table 3: Results of EFA

PVA2			.727
PVA1			.708
PVA3			.708
PVA4			.692

Table 3 shows how individual items (e.g., PI1, IE1, SD1...) load onto six different factors. Factor loadings greater than 0.7 are typically considered strong, indicating that the item strongly correlates with that factor. The variable AC2 had a factor loading less than 0.5 and was therefore excluded.

The author also conducted a Pearson correlation analysis, and the results indicated that all remaining factors had a significance level (Sig.) of less than 0.05, demonstrating a correlation with the dependent variable. Therefore, these factors were retained for inclusion in the linear regression model.

The regression analysis was conducted to examine the impact of five independent variables on students' participation in volunteer activities (Table 4). The R value of 0.851 indicates a strong correlation between the observed and predicted values. The R Square value of 0.724 suggests that approximately 72.4% of the variance in students' participation in volunteer activities is explained by the model. This is considered a very high explanatory power for social science research. The Durbin-Watson value of 1.785 is within the acceptable range (1.5 to 2.5), suggesting that no significant autocorrelation exists in the residuals.

				del Sum				
Model	R	R	Adjusted	R	Std. E	Error of the	Durbin-Wats	
		Square	Square		Estim	ate		
1	0.85	0.724	0.713			0.42218	1	.785
	1	-						
-	endent				Coeffi	cients		
Vari	ables	Unstar	ndardized	Stand	ardized	Sig.	Collinearity	/ Statistics
		Coef	ficients	Coeff	ficients			-
		В	Std. Error	В	eta		Tolerance	VIF
Personal	Intrinsic	0.204	0.046	0.184		0.006	0.701	1.426
Motivati	on (PI)							
Influence	e from	0.173	0.038	0.265		0.000	0.775	1.290
Others (I	(0)							
Skill		0.265	0.042		0.294	0.021	0.610	1.640
Develop	ment							
(SD)								
	ments and	0.182	0.043		0.230	0.000	0.695	1.438
Career								
Opportu	nities							
(AC)								
Institutio		0.159	0.039		0.202	0.001	0.683	1.464
Encoura	gement							
(IE)								

Table 4: Summary	y of linear	regression	analysis results

(Source: Synthesized by authors)

All five variables have p-values less than 0.05, confirming their statistical significance. The VIF values for all predictors range from 1.290 to 1.640, well below the common threshold of 10 while Tolerance values are all above 0.6, indicating no multicollinearity problem.

The level of influence of each factor, based on the results of the regression analysis, is presented in Table 5 below.

Table 5. Interpretation of Coefficients								
Factors	β	p-value	Interpretation					
	(Standardized)							
Skill Development (SD)	0.294	0.021	The most influential predictor.					
			Volunteering as a means of					
			developing skills is a major motivator					
			for students.					
Influence from Others (IO)	0.265	0.000	A strong and significant predictor.					
			Social influence (from peers, family,					
			etc.) plays a vital role in encouraging					
			student involvement.					
Achievements and Career	0.230	0.000	A significant motivator, confirming					
Opportunities (AC)			that students value the potential long-					
			term career benefits of volunteering.					
Institutional	0.202	0.001	Also significant. University support					
Encouragement (IE)			mechanisms (programs, faculty					
			encouragement, policies) positively					
			influence participation.					
Personal Intrinsic	0.184	0.006	A statistically significant, moderate					
Motivation (PI)			effect. Students with higher intrinsic					
			motivation are more likely to					
			participate in volunteering.					

Table 5. Interpretation of Coefficients

The ANOVA (Analysis of Variance) table provides important insights into the overall significance of the regression model used to predict student participation in volunteer activities. In the table 6, the Regression Sum of Squares (159.345) represents the amount of variation in the dependent variable that is explained by the five independent variables included in the model. The F-statistic value of 121.38 with a corresponding p-value of 0.000 indicates that the model is statistically significant at the 1% level. This means that at least one of the independent variables contributes meaningfully to explaining the variation in the dependent variable. In sum, the ANOVA results confirm that the regression model is highly significant and suitable for predicting students' decisions to participate in volunteer activities. The high F-value and low significance level strongly support the inclusion of the five selected independent variables in the model.

Table 0. ANOVA results									
ANOVA									
Model	Sum of	df	Mean Square	F	Sig.				
	Squares								
Regression	159.345	5	31.869	121.38	0.000				
Residual	61.056	286	0.213						
Total	220.401	291							

Table 6: ANOVA results	
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(Source: Synthesized by authors)

In sum, the ANOVA results confirm that the regression model is highly significant and suitable for predicting students' decisions to participate in volunteer activities. The high F-value and low significance level strongly support the inclusion of the five selected independent variables in the model.

5. Conclusion And Recommendations

The study examined the key factors influencing students' motivation to participate in volunteer activities at Tan Trao University. Using a mixed-methods approach with data from 1,075 students and applying SPSS 26.0 for analysis, the study identified five main predictors: Personal Intrinsic Motivation (PI), Influence from Others (IO), Skill Development (SD), Achievements and Career Opportunities (AC), and Institutional Encouragement (IE). The study's findings suggest that students are driven not only by internal values and altruism but also by tangible outcomes such as career preparation and skill acquisition. Furthermore, encouragement from peers and institutional support also play an essential role in fostering volunteer engagement. Thus, universities including Tan Trao University need to develop suitable policies to attract and encourage students participating in volunteer activities. Some recommendations are mentioned below:

Firstly, universities should implement awareness programs highlighting the benefits of participating in volunteer activities to enhance students' intrinsic motivation, or promote intrinsic motivation through reflection and values education by facilitating workshops or mentorship programs that emphasize the values and ethical importance of volunteering to nurture students' intrinsic motivation. When students are internally motivated, they are more likely to think and act positively, find joy in helping others, and actively seek opportunities to connect and learn from different people. Therefore, student clubs and organizations should promote and emphasize the value of contributing to the community that student volunteers can achieve through their involvement. In addition, universities should rises the number of small volunteer groups and diversify types of volunteer activities to match students' interests and capabilities. Students should be able to register based on their preferences, ensuring they are placed in environments where they can work with peers who share similar personalities, interests, or regional backgrounds. This fosters a more comfortable and enjoyable working atmosphere, ultimately leading to more effective volunteer work. Student clubs should also regularly organize community bonding activities to create a friendly environment, offer a platform for interaction, and strengthen the connection among volunteers and their engagement with volunteer work.

Secondly, universities should expand institutional support and encouragement. Providing logistical support, recognition systems, and flexible scheduling to reduce barriers to participation and affirm the university's commitment to civic engagement, is one of important solutions. In the digital age, where social media is rapidly evolving, student clubs should leverage these technologies to organize volunteer programs more effectively. For example, in addition to creating QR codes to share plans, detailed content, and organizational methods, clubs can apply AI technology to design summarized programs that help volunteers easily visualize the tasks involved. This approach can enhance the professionalism of event organization and increase the appeal of volunteer activities. In terms of resources, universities should collaborate with businesses to seek financial sponsorship and provide support for students. This may include covering transportation and meal expenses for off-campus volunteer work, as well as supplying uniforms, protective gear, and essential equipment to ensure students' safety during volunteer activities.

Thirdly, it is evident that students who participate in volunteer activities also aspire to achieve certain accomplishments, such as earning extra training points or receiving titles like "Five-Good Student". These achievements can enhance their chances of receiving scholarships. Moreover, engaging in volunteer activities and gaining such recognition also contributes to a stronger profile when seeking employment after graduation. Therefore, in the university's student evaluation system, criteria related to volunteer work should be assigned higher weight. Likewise, scholarship programs and award titles should include relevant volunteer certifications as one of the assessment criteria. The university should organize an annual ceremony to honor outstanding volunteers and publish their names on the school's website and fan page as a way of acknowledging their contributions and encouraging broader student participation. In addition, the university and Youth Union should have several policies to strengthen career-oriented volunteering through integrating volunteer activities with career development initiatives, such as offering certificates, internships, or credit recognition, to appeal to students' desire for career advancement.

Next, students at the university currently have various ways to develop their skills in response to the increasingly demanding requirements of the labor market. Participating in volunteer activities is considered an effective solution for students to improve their soft skills. This requires volunteer clubs to organize workshops for sharing experiences in leadership, organizational skills, adaptability in various situations, teamwork, and hands-on experiential programs that allow volunteers to enhance their capabilities. The university and student clubs can also integrate volunteering into academic programs to help students develop professional expertise and align volunteer activities with their fields of study. For example, education majors can teach children in underprivileged areas; engineering students can volunteer to repair roads and bridges or design traffic solutions for communities; environmental science students can participate in waste recycling projects or initiatives to protect water resources; and economics students can support social enterprises or provide training to help people in disadvantaged areas develop economic skills. Through such activities, students will build greater self-confidence and maturity.

Besides, the university should also leverage the influence of society and the community to spread the humanitarian values of volunteer activities. The university can utilize student ambassadors or alumni who actively volunteer to inspire peers, creating a culture of peer motivation and social encouragement.

Conflicts of Interest: The authors declare no conflict of interest.

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