Rapid Communication

Factors Influencing Player Preferences for Heroic Roles in Role-Playing Games

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ABSTRACT

Two studies were conducted to investigate whether player personality or social cognition influence preferences for heroic roles in role-playing games (RPG). In Study 1, 149 teenager subjects were categorized into five groups according to the Guilford Personality Inventory. Heroes were clustered into three types based on their attributes. The analysis of variance (ANOVA) results indicated that each personality group did not display distinctive preference for any particular heroic type. However, of the three heroic types teenagers most strongly preferred, *Justice Warrior* was followed, in order of preference, by *Visionary Leader* and *Saint*. In Study 2, the influence of three player social cognition factors (similarity, proximity, and familiarity) on player preference for heroic roles was studied. Multiple regression analysis results indicated that similarity and familiarity predicted player preferences for heroic roles.

INTRODUCTION

ROLE-PLAYING GAMES (RPG) are very popular with youngsters. Factors for designing a popular RPG receive great attention in the computer game industry. Of all the RPG design factors, role design is a critical factor for designing a popular game.

This research explores player preference roles from two perspectives: *player personality* and *player social cognition to roles*. Personality plays an important role in influencing a person's game choice.[1] Personality might also affect players' role preference. Moreover, the hypothesis that player social cognition to roles may affect their preferences for RPG roles stems from earlier research which claims that social cognition factors (i.e., similarity, proximity, and familiarity) affect interpersonal relationships.[2]

Within this research context, social cognition factors are defined as: Similarity indicates how similar a player may feel to an RPG role when comparing himself to the role from all possible perspectives.[3] Moreover, proximity indicates the temporal or spatial distance between a player and a role, i.e., how close to the role the player may feel.[4] Lastly, familiarity indicates how frequently a player is exposed to the role.

Two studies were conducted to examine the influence of personality and social cognition factors on role preference respectively. Heroic roles were selected as the RPG roles for investigation because heroic roles appear very frequently in existing RPGs.

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METHODS

Study 1

One hundred forty-nine teenagers (mean age = 19 years; SD = 3.25 years) participated in this study. All subjects were classified into five personality groups: average type, black-list type, calm type, direct type, and eccentric type, based on their scores on the Taiwanese version of the Guilford Personality Inventory.[5] The test-retest reliability was 0.78–0.92, and validity was 0.64–0.85.

Thirty-five heroic roles were selected for study. The selected heroes represented the whole spectrum of heroes from different cultures and ages. A list of 16 adjectives was gathered describing hero attributes through focus group meetings (Table 1). Subjects rated the extent of each hero attribute using a five-point rating scale. The 35 heroes were classified into three groups (i.e., *Saint*, *Justice Warrior*, and *Visionary Leader*) using factor analysis (Principal Components Factoring) and cluster analysis (Ward Method). The main *Saint* attribute was the moral factor. The main *Justice Warrior* attributes included bravery and moral factors. The main *Visionary Leader* attribute was the visionary factor. Lastly, each subject rated his preference to play each heroic role using a five-point rating scale.

Study 2

Of the 35 heroic roles, each subject was requested to rate his preference for each role and his social cognition (i.e., similarity, proximity, and familiarity) to the role using a five-point rating scale. A step-wise regression analysis was conducted to investigate the relationship between a player's *preference* for a heroic role and a player's social cognition to the heroic role.

TABLE 1.   ADJECTIVE TERMS FOR HEROIC ATTRIBUTES

Trustworthy	Cool
Unbeatable	Charismatic
Capable	Courageous
Persevering	Ambitious
Unselfish	Calm
Visionary	Just
Gracious	Mighty
Daring	Leadership

RESULTS

Study 1

A two-way analysis of variance (ANOVA) test, of five personality types × three hero types, was conducted to examine whether a particular group of players preferred a particular group of heroes. The results revealed that the main personality type effect was not statistically significant ($F_{(8, 160)}$ = 0.386, $p > 0.05$) while the main heroic type effect was significant ($F_{(2, 160)}$ = 50.522, $p < 0.01$). Scheffe's post hoc test indicated that players preferred to play the *Justice Warrior* role rather than the *Visionary Leader* ($p < 0.01$) or *Saint* ($p < 0.01$) role.

Study 2

The result indicated that only two factors (i.e., similarity and familiarity) could significantly predict a player's preference for a heroic role, $Y = 1.361X_{similarity} + 0.231X_{familiarity} - 0.949$ ($R^2 = 0.879$). Of the two influential factors, similarity ranked first in terms of β values, followed by familiarity.

CONCLUSION

The study indicates that there is no strong evidence to support that player personality affects player preferences for RPG roles. This finding implies that there is no need to customize heroic role design for players with different personalities. However, teenagers have distinct preferences for different heroic types. The heroic *Justice Warrior* type is most preferred, followed by *Visionary Leader* and *Saint*.

The study also indicates that both similarity and familiarity influence player preferences for heroic roles. This finding has design implications. First, heroic role design should have a higher similarity to players in terms of appearance, race, language, social class, gender, and other social-economic factors. In other words, an RPG game should be compatibly tailored to the target market culture. Second, heroic role promotion is very important. Players increase their heroic role preference when they become more familiar with the role.

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