YOU PLAY. WE GIVE.
Exploring the Factors that Drive Users’ Intention to Play Social Impact Games

Julia Wübbe (s0169986)
University of Twente
Faculty of Behavioural Science
Communication Studies

Graduation Committee:
1st Dr. Mirjam Galetzka
2nd MSc. Niels Baas
ABSTRACT (EN)
Recently, social impact games as a new genre of social network games (SNGs) have become increasingly popular and are perceived as an innovative way to combine social good with an entertaining gaming experience. The present study wants to examine the driving forces that influence users’ intention to play social impact games. Building on extensive literature review and qualitative research, this study proposed a theoretical model based on attitudinal beliefs, social influences and motivational factors as primary influencing factors, and game features, including perceived altruism, perceived privacy and game-cause fit as moderator variables. Results from an online survey among 126 players of the social impact game ‘Half the Sky Movement’ validated that the proposed model explains and predicts users’ intention to play social impact games very well. The model established that attitude toward the game, perceived enjoyment, and perceived usefulness were the main drivers for users’ intention to play social impact games. Based on the results of this study, both theoretical implications and practical implications for game developers and cause marketers are provided.

ABSTRACT (NL)
Tegenwoordig worden ‘social impact games’, een nieuw genre van social network games (SNGs), steeds populairder. ‘Social impact games’ zijn een innovatieve manier om het goede doel te koppelen aan een plezierige gaming ervaring. Dit onderzoek heeft als doel inzicht te verkrijgen in de factoren die van invloed zijn op de intentie van gebruikers om ‘social impact games’ te spelen. Op basis van het literatuuronderzoek en kwalitatieve onderzoek werd een model opgesteld met attitudes, sociale invloed factoren en motivatie factoren als primaire invloed factoren, en game features, zoals waargenomen altruïsme, waargenomen privacy en game-cause fit als moderator variabelen. De resultaten van een online enquête onder 126 spelers van de ‘social impact game’ ‘Half the Sky Movement’ toonden dat het model geschikt is om de intentie tot spelen te meten. Het bleek dat attitude ten opzichte van het spel, plezier en het gepercipieerde nut de belangrijkste factoren zijn. Op basis van dit onderzoek kunnen zowel theoretische als praktische aanbevelingen voor game-ontwikkelaars en cause marketeers geformuleerd worden.
INTRODUCTION

“Games are invading the real world – and the runaway popularity of Farmville and Guitar Hero is just the beginning”, claimed game designer Jesse Schell (2010). Online games played on social networking sites (SNS), such as Facebook attract millions of players on a daily basis. In fact, social network games (SNGs) represent a fast growing phenomenon that has emerged as the top application of SNSs (Chen, 2009) and have created a whole new subculture (Shin & Shin, 2011). Compared to online games, SNGs are a type of browser game that are distributed primarily through social networks, which enable players to share their gaming experience and typically feature multiplayer and asynchronous game play mechanics (Chang, 2012). The recent impressive increase in the number of users playing SNGs has attracted the attention of both researchers and practitioners, including marketers. As SNGs offer a new range of opportunities for user engagement, user experience and entertainment, cause marketers have recognized the potential of combining gaming with social good.

Social impact games: Supporting social causes through online gaming

Social impact games recently emerged as a new genre of social network games. The games intend to promote awareness of societal problems through the interactive and entertaining use of SNGs. In the games, players can make donations of virtual goods and make equivalents real-world donations to Non-Profit Organizations (NPOs). In the past two years, Zynga, one of the leading providers of social game services has successfully implemented the concept of gaming for social good in various games. As an example, Zynga was able to raise $1.5 million after the Haiti earthquake by allowing players in FarmVille to buy Haiti white corn. After the Japan earthquake, Zynga teamed up with the NPO Direct Relief and created a virtual fan in the game MafiaWars that players could buy. In total, Zynga was able to raise $4.2 million that benefitted over 25 NPOs in 2012 (Huffingtonpost, 2013).

As online and social network games gained in popularity, scientists have shown increased interest in the area of users’ intention to play these games. Past research has demonstrated that cognitive and affective attitudinal beliefs (Lee & Tsai, 2010; Shin & Shin, 2011), intrinsic and extrinsic motivational factors (Chang & Chin, 2011, Koo, 2009, Yee, 2006) social influences (Hsu & Lu, 2004), flow experience (Chang, 2012; Hsu & Lu, 2004) and underlying beliefs, such as security, trust and privacy (Shin, 2010; Wu & Liu, 2007), amongst other factors, affect users’ intention to play online and social network games. As social impact games describe a relatively new genre of SNGs and an innovative implementation of cause-related marketing (CRM), the scientific knowledge in this field is scarce. To investigate this new topic and complement existing research on user behaviour in
online environments, insights from behavioural theories (e.g., Theory of Planned Behaviour) and motivational theories serve as theoretical framework. The present study proposes a theoretical research model to generate in-depth insights. Furthermore, it takes a user-centred approach that focuses on player dimensions in order to explore and identify the primary forces that drive users’ intention to play social impact games. Therefore, the research question central to this study is as follows:

**Which behavioural and motivational factors drive users’ intention to play social impact games?**

In order to provide an adequate answer to this research question, two studies were carried out. In the first study, qualitative research was conducted to cross-validate factors identified from the literature, to learn about context-specific factors, formulate additional hypotheses, and therefore to guide the design for the second quantitative study. The second study was based on an online survey to test the hypothetic research model. Building on these findings, the present study makes both theoretical and practical contributions and serves the following purposes: First of all, a contribution is made to the online usage behaviour research by investigating a new phenomenon. Secondly, it fills the scientific gap by introducing a theoretical model, which sheds light on the context-specific factors of social impact games. By this means, the present study follows researchers’ call for more research on context-specific behaviours with certain technologies. According to Shin and Shin (2011), this is particularly important in the context of social technologies like online games, which consist of new concepts and paradigms. Finally, research findings should be interesting to social impact game developers in their general attempt to understand the driving forces that affect users’ intention to play social impact games and to increase social impact game usage.
THEORETICAL FRAMEWORK

Research into users’ intention to play online and social network games

Earlier research in the field of online gaming has revealed that players’ intention to engage in online and social network games is influenced by a variety of factors (e.g., Chang & Chin 2011; Lee, 2009; Lee, Lee & Choi, 2012; Lee & Tsai, 2010; Shin & Shin, 2011). The first set of these factors is grounded in the Theory of Planned Behaviour (TPB; Ajzen, 1991), a theory which has been extensively and successfully applied to consumer behaviours in various contexts, including online usage behaviour (e.g. Hung & Chang, 2005; Liao, Chen & Yen, 2007; Lin, 2007; Lu, Zhou & Wang, 2009). TPB assumes that consumers’ attitude, subjective norm, defined as “a person’s perception that most people who are important to him think he should or should not perform the behaviour in question” (Fishbein & Ajzen, 1975, p.302), and perceived behavioural control, which refers to “people’s perception of ease or difficulty in performing the behaviour of interest” (Ajzen, 1991, p.183) affect behavioural intention. Previous studies have revealed that the theoretical foundation of the TPB has significant and explanatory power for understanding the behavioural intention to play online games.

Lee (2009) pointed out that players’ attitude toward the game strongly determines their intention to play online games. People are more willing to play if they have a positive attitude toward playing. Similar results have been found in the studies of Wu and Liu (2007) and Lee and Tsai (2010) who confirmed the importance of a positive attitude. The present study assumes that this general causality may also apply to the context of social impact games. Hence, comparable results are expected:

H1a. A positive attitude toward playing social impact games positively affects users’ intention to play social impact games.

Research findings in the context of cause-related marketing (CRM) (e.g. Koschate-Fischer, Stefan & Hoyer, 2012) have revealed another aspect of attitudinal beliefs, namely peoples’ attitude toward helping other people. According to Webb, Green and Brashear (2000) this attitude entails “global and relatively enduring evaluations with regard to helping or assisting other people” (p.300). In their research on consumers’ willingness to pay for CRM and the impact of the donation amount, Koschate-Fischer et al. (2012) showed that peoples’ attitude toward helping other people played an important role in the explanation of consumers’ willingness to pay for cause-related marketing. Accordingly, the present study assumes that a user with a strong held attitude toward helping others will consider it more important that
others receive help and will be more inclined to play a social impact game in order to unlock a donation. Thus:

**H1b.** A positive attitude toward helping other people positively affects users’ intention to play social impact games.

In addition to attitudinal beliefs, the TPB suggests that social influences are crucial in shaping user behaviour. This study distinguishes two types of social factors. The first factor, subjective norm is defined as “the perceived social pressure to perform or not to perform the behaviour” (Ajzen, 1991, p.188). And as Lee (2009) summarized it, “subjective norm is related to normative beliefs about expectations from other people” (p. 853). The construct had significant direct effects on users’ intention as well as continued intention to play online games (Lee, 2009; Lee & Tsai, 2010; Wu & Liu, 2007). Results indicated that many online game players play the games only because their friends are playing and recommend to do so. Players’ desire to act like others might be particularly strong in the context of social impact games, as the games offer a fun and simple way to do something good. Thus, it is hypothesized that:

**H2a.** Subjective norm, as the perceived social pressure to play is positively related to users’ intention to play social impact games.

Hsu and Lu (2004) incorporated perceived critical mass as a second social factor in their adoption model of online games. The construct denoted “the extent to which the user believed that most of their peers were playing an online game” (Hsu & Lu, 2004, p. 858). The authors empirically showed that social influences significantly, directly, and separately, affected attitudes and intentions. Taking into consideration that social impact games are primarily played on social networking sites like Facebook, which enables increased interpersonal interaction among users/players, this study assumes that the resulting perception of critical mass may influence players’ intention to play:

**H2b.** Perceived critical mass is positively related to users’ intention to play social impact games.
Perceived behavioural control as a third factor of the TPB implies that users’ have the requisite resources, skills or opportunities to perform the desired behaviour (Lee, 2009). The factor significantly affected users’ behavioural intention to play (Lee, 2009) and was among the important concepts with direct effects that facilitated users’ continued intention to play online games (Lee & Tsai, 2010). Pagulayan, Keeker, Wixon, Romero and Fuller (2007) conducted research on user-centered designs in games and found that the behavioural control, respectively the ease of use of a game’s control and interface is closely related to players’ fun ratings for that game. More specifically, the authors claim that players should be able to translate their intention into in-game behaviour to avoid feelings of frustration, which could lead the user to perceive the game as being unfair or simply inaccessible (Pagulayan et al., 2007). Building on this finding, the present study assumes that the same may hold for the context of social impact games. If users’ believe that the game is easy to play, that they are capable of reaching the goals defined by the game and meeting the challenges within the game (e.g. to unlock a free donation), they are more likely to play the game. Hence, comparable results are expected:

**H3.** Perceived behavioural control positively affects users’ intention to play social impact games.

**Motivational factors as driving forces**

Another stream of research, which has been successfully applied in the gaming context deals with motivation theories. One of the most widely used distinctions is made between intrinsic and extrinsic motivations. According to Ryan and Deci (2000), intrinsic motivation refers to “doing something because it is inherently interesting or enjoyable” (p. 55). In contrast, external motivation refers to “doing something because it leads to a separable outcome” (Ryan & Deci, 2000, p. 55). Both types are said to affect the intention to use information technology systems (Davis, Bagozzi & Warshaw, 1992).

**Intrinsic Motivation**

In the context of hedonic systems, which offer entertaining and playful content, such as online games, perceived enjoyment has been identified as intrinsic motivational factor and a strong determinant of the intention to play (e.g. Koo, 2009; Shin & Shin, 2011; Wu, Wang & Tsai, 2010). Hsu and Lu (2007) suggest, “the main purpose of participating in online game community is for leisure and pleasure, not to achieve specific goals nor to improve
performance” (p. 854). Previous studies identified perceived enjoyment as one of the most important factors affecting the behaviour of online game users. The construct had a significant influence on both attitude and intention to play (Lee, 2009). Findings of Chang and Chin’s research (2012) on the usage intention of SNGs revealed similar results as higher levels of perceived enjoyment lead to higher levels of usage intention. Shin and Shin (2011) identified perceived playfulness (PP) as antecedent for perceived enjoyment and emphasized PP’s strong effect on players’ attitude. “Players consider the most critical factor of SNGs to be whether the game is playful and thus fun” (Shin & Shin, 2011, p. 857). In summary, scholars suggests that perceived enjoyment while playing online games will lead to positive attitudes and expectations of games, which provide more enduring reasons or motives for playing (Boyle, Connolly & Hainey 2011). Following these homogenous and convincing findings, this study assumes that comparable results are expected for social impact games. Being able to do something good while enjoying the game may influence users’ intention to play the game. Hence, the following is expected:

**H4.** Perceived enjoyment positively affects users’ intention to play social impact games.

*Extrinsic Motivation*

While the previous paragraph has revealed consistent results with regard to the importance of intrinsic motivation on the intention to play, prior research findings on the effect of perceived usefulness assessed as extrinsic motivation have yield contrasting results. Davis (1989) defined usefulness, as “the degree to which a person believes that using a particular system would enhance his or her job performance” (p.320). In their study on the perceived factors, which contribute to SNG user behaviour, Shin and Shin (2010) modified the orthodox definition used by Davis (1989) to apply it to peoples’ personal productivity, as opposed to the collective productivity. For this purpose, Shin and Shin (2010) highlighted the aspect described as “capable of being used advantageously” (p. 854), which also applies to the context of the present study.

Many scholars (e.g. Lee, 2009; Lu, Zhou & Wang, 2009; Sledgerianowski & Kulviwat, 2009; Yen, Wu, Cheng & Huang, 2010) have found that users’ thinking as to the usefulness of a system had great influence and is positively related to the adoption of information technology. Applied to the context of online games and contrary to prior expectations, perceived usefulness had no direct influence on attitude and intention in Lee’s research (2009). The results of Hsu and Lu’s (2004) study indicated that the concept did not motivate users to
play online games, but it directly affected their attitude. Opposite results have been found in Shin and Shin’s (2011) study in the context of SNGs. While the effect of perceived usefulness on attitude was weak, the effect on intention turned out to be significant. Chang and Chin (2011) and Lin and Lu (2011) both support the ultimate influence of perceived usefulness on the usage intention. The latter authors revealed that the positive influence of usefulness on continued intention to use SNS elevates when the user believes SNS upgrades the efficiency of his information sharing and connecting with others, or enables him to know more people. The same may hold to the context of the present research. As discussed in the introduction, social impact games aim to promote and raise awareness of societal problems and educate players on real-world problems. As “Games for Change”, a non-profit corporation that facilitates the creation and distribution of social impact game pointed out that “social impact games serve as critical tools in humanitarian and educational efforts” (Gamesforchange, 2013). Therefore, social impact games may improve players’ efficiency in making a contribution to a charitable cause on the one hand, and enable players to gain information, facts and figures on serious and complicated issues in a fun way on the other hand. Both may impact players’ perceived usefulness of the game. Hence, the following is expected:

H5. Perceived usefulness positively affects users’ intention to play social impact games.

Cause-related and donation-related consumer predispositions

While the previous paragraphs focussed on research findings in the field of online and social network games, the second part shifts attention to work related to traditional cause-related marketing (CRM). The concept of cause involvement has been derived from CRM literature as important cause-related consumer predisposition. It refers to the degree to which a customer considers the problematized societal issue or relief project as personally relevant (Grau & Folse, 2007). Based on a review of the extant published literature on the subject conducted by Hajjat (2003), high issue involvement occurs when a cause has personal relevance, intrinsic importance, and a direct impact to peoples’ life or if it provides immediate situational rewards. Previous research on cause-related customer predispositions (e.g. Arora & Henderson, 2007; Koschate-Fischer et al., 2012; Prajecus & Olsen, 2004) verified the important role of peoples’ cause involvement and found a positive effect on various outcome variables, such as consumer choice and willingness to pay for CRM. Therefore, the present study assumes that linking the game with a cause that is of personal importance to players can
create an emotional bond with the game, which in turn may influence their intention to play the game. Hence, the following is expected:

**H6. Users’ cause involvement positively affects their intention to play social impact games.**

Research in economics investigated charitable giving as a contradiction to the standard economic assumption of pure self-interest (Mayo & Tinsley, 2009). However, Andreoni (1989) found that being charitable is not solely altruistic. Scientists have revealed that consumers purchase CRM products primarily in order to feel good as a result of the mere act of charitable giving. This effect has been described as “warm glow” (Andreoni, 1989), or “moral satisfaction” (Kahneman & Knetch, 1992). According to Henderson and Arora (2010), people may acquire the warm glow effect or moral satisfaction when they evaluate promotions, which link choice to the collective good. The present study perceives the construct as another intrinsic motivational factor and donation-related consumer predisposition (Koschate et al., 2012). According to Andreoni (1989), people do not only care about the utility of the recipient, they also receive some private-goods benefit from their prosocial behaviour per se. In their research, Koschate et al. (2012) found that the warm glow motive plays an important role in the explanation of consumers’ willingness to pay for CRM. This finding is supported by Frier (2010), who conducted research on the critical success factors of cause-related marketing, in which warm glow proved to be an important psychological driver. The construct had great impact on consumers’ strength of brand preference and facilitated consumers’ purchase decision. Following this argumentation, another hypothesis has been formulated:

**H7. Warm glow positively affects users’ intention to play social impact games.**

Research has shown that consumers are more likely to purchase a CRM product if they believe that the money donated by the company will benefit recipients and be used to support the designated cause (Scholder, Webb & Mohr, 2006). As a consequence, perceived effectiveness has been identified as another important extrinsic motivational factor. According to Frier (2010), the construct will enhance the success of a CRM campaign, because the company has to convince the consumer that the campaign is legitimate. Following this argumentation, another hypothesis has been formulated:
**H8.** Perceived effectiveness of the game positively affects users’ intention to play social impact games.

**The moderating role of perceived altruism**

Next to perceived effectiveness, consumers demand that companies prove authenticity and are truly committed to the causes. Chaney and Dolli (2001) found that if consumers perceive companies act for altruistic reasons, and not only for ulterior motives, such as sales increase, the company can inhibit consumers’ scepticism. As a consequence, perceived altruism may be a relevant research topic with respect to social impact games, because it can be perceived as an important game feature. Hence, the present study introduces perceived altruism as a possible moderator variable. As such, it is predicted that perceived altruism systematically modifies either the form and/or strength of the relationship between the motivational factors and the intention to play (Sharma, Durand & Gurarie, 1981). Therefore, the following hypothesis has been formulated:

**H9.** The effect of motivational factors on users’ intention to play social impact games will be moderated through the perceived game’s altruism.
The following conceptual model depicts the relationships among the variables as hypothesized and outlined in the previous sections:

**Fig.1. Conceptual model**
STUDY 1

It can be assumed that social impact games differ from other online and social network games as they have unique features and objectives, which may particularly influence user’s intention to play these games. Therefore, it is worthwhile to explore new variables. In this first study, qualitative research was conducted to cross-validate factors identified from the literature, to learn about context-specific factors, and to guide the design for the second quantitative study.

Participants

The selection of respondents was based on the principle of purposeful sampling. The sample consisted of five women and three men, both gamers and non-gamers, who had no prior experience with the new genre of social impact games. The participants were aged between 24 and 28 and students or graduates of different academic disciplines including Communication Studies, Business Administration, Psychology, and European Studies. This sample is justified given that SNG players fit the demographics of students/graduates. Participants of the first study did not later participate in the second study.

Instrument

For the first study the think-aloud method was employed, which has been introduced in usability evaluation by Lewis in 1982. According to Cotton and Gresty (2006), the think-aloud method “enables the evaluation of the thought processes or decision making of someone performing a specific task” (p. 48). As the name implies, it requires the user to speak out loud whatever thoughts come to his/her mind while performing the task under assessment. Thereby, the think aloud method avoids interpretation by the respondent and only assumes a simple verbalization process (Van Someren, Barnard & Sandberg, 1994). In the context of online games, the think aloud method has become an established practice in usability evaluation (Pagulayan, Keeker, Wixon, Romero, & Fuller, 2007).

Procedure

Participants were asked to play the recently developed social impact game ‘Half the Sky Movement’. Launched in March 2013, the game was selected for its potential novelty among participants. Presented on the SNS Facebook, ‘Half the Sky Movement’ aims to raise awareness and funds to empower women and girls living under difficult circumstances across the world. The game is the latest instalment of the Half the Sky Movement, which includes a book and a documentary. Players of the game embark on a global journey, meet different
characters and take action in a very simple way by unlocking funds from the game’s sponsors to make direct impact. For example, players can collect books for young girls in the virtual world and then activate a real-life donation of books to one of the game’s non-profit partners (NPOs). Players can also choose to make personal donations to any of the NPOs at any point throughout the game (Facebook/HalftheGame, 2013).

During the experimental phase of the study, each participant read a brief description of the game, individually played ‘Half the Sky Movement’ for 20 minutes and was asked to verbalise his/her thoughts and feelings while playing. The following instruction was given: “As you play ‘Half the Sky Movement’, please keep talking out loud everything that you think or do in playing. Try to say everything that goes through your mind, such as your thoughts, feelings, and choices about what you are doing and seeing on screen”. If the participants did not think-aloud, the researcher interfered and asked questions like “what are you doing now?” or “how are you feeling”. The responses were captured with a digital recorder for later transcription.

Data analysis
Following Yin’s (1984) proposition on the case study method, two steps were taken to analyse the data. Firstly, within-case analysis was conducted in order to identify patterns and themes for each participant. Secondly, cross-case analysis focussed on identifying similarities and differences across the participants. As a result, different categories emerged including various statements and meanings. The results of this data coding process are described in the following paragraph.

Results

Verifying behavioural and motivational factors
The results of the qualitative study verified some of the finding obtained from prior literature, which will briefly be discussed in the following paragraph. This enables us to get a more accurate picture of the driving forces of users’ intention to play social impact games.

As mentioned before, participants had no prior experience with this new genre of social network games. Yet, respondents’ overall impression of ‘Half the Sky Movement’ and their attitude toward playing the game was very positive as the brief game description aroused participants’ curiosity (“I am used to get invitations to join FarmVille or to start playing Candy Crush Saga, but this sort of game is new to me”). and raised several questions concerning the game mechanics. “As a general rule I have avoided Facebook games, and I
have never heard of social impact games before, but I like the idea of online games promoting social good!” stated one respondent. And another respondent added “being able to do something good while being far away and having fun playing the game is awesome! (If you consider that the help will eventually reach them, so it’s also a leap of faith)”. In line with the findings of the literature review, the results of study 1 reaffirmed that a positive attitude toward the game is crucial for users to start playing. The so-called “look and feel” (mixture of graphic, illustration, narrative, dialogue, tasks and challenges) of ‘Half the Sky Movement’, as one respondent described it, was primarily decisive for respondents to start and keep playing.

Apart from attitudinal beliefs, all respondents pointed out that enjoyment is an important, if not the most important motivational factor to play a social network game. This also applies to ‘Half the Sky Movement’. The following statement clearly expresses users’ demand for a fun and engaging gaming experience: “I like the idea of helping other people while playing this game, but the main reason I would continue playing it after this session is for leisure and pleasure”. A major part of the game experience in ‘Half the Sky Movement’ is the dialogue and narrative, which has an educational and guiding function throughout the game. The amount of text presented on screen has been criticised by three participants, who argued that this would decrease game speed and the fun factor as illustrated in the following statements: “It kind of reminds me of a strategy game as I have to do a lot of reading to make my way through the game”. “The narratives are well written, but it’s pretty exhausting and I would like to click through it more quickly to get to the next challenge or mini game”. Game developers have to cope with the challenges of finding that balance – how much to simplify complicated issues, how much fun to include and how much to focus on positive solutions versus grave challenges. In summary, the first study confirmed the findings derived from past research on the importance of perceived enjoyment in all aspects.

While participants emphasised the fun part of playing ‘Half the Sky Movement’, serious thoughts have been given to the effectiveness of the game. During the experimental phase players were able to take action and unlock a free book donation of one of the game’s partners. In this connection, participants raised various questions, such as “How do I know that all money collected in the game actually goes to charity?” The game gives players multiple ways to take action from the game, from making financial contributions to allowing players to get involved without spending money, such as signing a petition, tweeting, message or hosting a fundraiser for a particular cause. In line with findings from the literature review, participants stated that they are more likely to get involved in and be committed to the game if
they believe that the donations will be used to support the designated cause. In summary, it can be said that the perceived effectiveness of the game is an important driver for users’ intention to play ‘Half the Sky Movement’.

Identifying context-specific factors
The first study did not only validate some of the prior identified influential factors, it also revealed additional context-specific factors. First of all, the results showed that *social interaction* in the game is perceived as another important intrinsic motivational factor. “I would be more likely to play the game if I would know that my friends are playing it as well”. The majority of participants argued that they would be more likely to play the game if they could socialize and build relationships with others in the game in order to unlock donations more effectively. As one respondent pointed out “it would be great if you could actually engage your friends in the game, rather than just requesting/sending things to each other, and also allow for selecting in-game friends only, like in FarmVille”. Players are willing to invite friends to join the game and share their engagement if the game offers incentives to do so as stated by another respondent. In ‘Half the Sky Movement’ players receive extra energy by inviting friends, which in turn enables them to complete more quests. Building on the finding that social interaction in the game itself would increase users’ intention to play the game, the following hypothesis has been formulated:

**H10. Users’ social interaction experience in playing social impact games positively affects their intention to play.**

Secondly, participants emphasized the relevance of the *fit between the game and the charitable cause*. The construct, described in this study as another game feature (in addition to perceived altruism as discussed earlier) indicates that players highly appreciate content quests, which they have to complete in order to unlock donations that make sense to them, deal with real-life problems and matches the overall mission of the game – empowering women and girls in the case of ‘Half the Sky Movement’. Participants valued the fact that the gaming experience was presented though the lens of a native woman herself, rather than of a hero who saves her. This is reflected in the following two statements: “The protagonist is a woman that through learning and effort changes her ill-fated life by herself and the help of other women, this is great and makes this game so realistic and authentic”. And “it’s awesome to be playing an native Indian woman working with other people of colour and meeting them on
their own terms”. A clear game-cause fit, which enables players to empathize with the challenges and social issues addressed in the game, is an important condition that may affect players’ motivation to play the game, as predicted in this study. Previous studies in the field of CRM have highlighted the importance of the company-cause fit (e.g. Gupta & Pirsch, 2006, Koschate-Fischer et al., 2012). In that context, fit referred to the perceived link between the company’s image, its positioning and target market and the cause’s image (Varadarajan & Menon, 1988). According to Gupta and Pirsch (2006), the company-cause fit significantly increased consumers’ purchase intention. Koschate-Fischer et al., (2012) also emphasized the important role of the company-cause fit in the explanation of consumers’ willingness to pay for cause-related marketing. Against this background, it is reasonable to assume that the game-cause fit may impact the relationship between the intrinsic and extrinsic motivational factors and users’ intention to play. Hence, the following is expected:

**H11. The effect of motivational factors on users’ intention to play social impact games will be moderated through the game-cause fit.**

Finally, respondents highlighted the critical role of perceived privacy in the game. In the SNS context, the construct has been defined as “control over the flow of one’s personal information, including the transfer and exchange of that information” (Shin, 2010, p.430). ‘Half the Sky Movement‘ enables players to play at no charge. However, the game gives players the option to donate to several organizations in order to level up in the game quickly. Respondents wondered what and how information is collected and whether their personal details would be shared with third parties. As one respondent argued, “suddenly, I find myself being asked to enter my visa number to make a financial contribution. Well, I do not have the resources and I would not want to share my credit card details on Facebook”. According to Dwyer, Passerini and Hiltz (2007), privacy within SNSs is often not expected or is undefined. In light of users’ demand for privacy protection, it can be assumed that privacy concerns with regard to social impact games are an critical issue that may impact players’ overall donation behaviour. Moreover, this study proposes that the “unwarranted access of private information” (Shin, 2010, p. 428) may even impact players’ intention to play the game in the first place by moderating the relationship between the motivational factors and the intention to play. Hence, another hypothesis has been formulated:
H12. The effect of motivational factors on users’ intention to play social impact games will be moderated through the perceived game’s privacy.

Conclusion
The objective of this qualitative research was to investigate which factors contribute to users’ intention to play ‘Half the Sky Movement’. Consistent with the findings derived from prior research, this study was able to confirm the relevance of the following factors: Attitude toward the game, perceived effectiveness of the game and perceived enjoyment. Additionally, the results revealed that three factors could be added to the conceptual model. First of all, participants indicated that social interaction is another important intrinsic motivational factor for participants to play ‘Half the Sky Movement’. Secondly, two more game features were identified, namely game-cause fit and perceived privacy that moderated the effect of the motivational factors on the intention to play social impact games.
The following research model depicts the relationships among variables based on the findings of the literature review and the results of the first study.

**Fig.2. Research model**
STUDY 2

Design and Participants

To evaluate the hypothesized research model (Fig. 2) data were collected by means of an online survey over a period of three weeks in April 2013, one month after ‘Half the Sky Movement’ was launched. The questionnaire was spread via Facebook and Twitter. In total, 165 participants took part in the survey of which 39 responses were excluded from the statistical analysis due to missing data. The final sample comprised 126 valid and usable responses. Of the respondents, 90.5% were female and 9.5% were male with an average age of 31 years (SD= 11.16). 34.9% of all participants declared a bachelor’s degree as their highest completed degree of education. The sample comprised respondents with widely divergent backgrounds, with the majority coming from North America (59.5%). About a quarter of all participants (25.4%) indicated that they have played ‘Half the Sky Movement’ on average more than 10 times a week and 56.3% declared to play the game less than an hour per day. Table 1 provides a full description of the sample composition.

Table 1
Sample composition (N=126)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage (%)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>9.5</td>
<td>12</td>
</tr>
<tr>
<td>Female</td>
<td>90.5</td>
<td>114</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage (%)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;16 to 21 years</td>
<td>19.2</td>
<td>24</td>
</tr>
<tr>
<td>22 to 29 years</td>
<td>35.7</td>
<td>45</td>
</tr>
<tr>
<td>30 to 36 years</td>
<td>19.2</td>
<td>24</td>
</tr>
<tr>
<td>37 to 43 years</td>
<td>13.7</td>
<td>17</td>
</tr>
<tr>
<td>44 to 50 years</td>
<td>4.0</td>
<td>5</td>
</tr>
<tr>
<td>51 to 57 years</td>
<td>5.0</td>
<td>7</td>
</tr>
<tr>
<td>&gt; 57 years</td>
<td>3.2</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Percentage (%)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some high school</td>
<td>6.3</td>
<td>8</td>
</tr>
<tr>
<td>High school diploma</td>
<td>5.6</td>
<td>7</td>
</tr>
<tr>
<td>Some college</td>
<td>23.3</td>
<td>29</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>34.9</td>
<td>44</td>
</tr>
<tr>
<td>Some graduate school</td>
<td>7.1</td>
<td>9</td>
</tr>
<tr>
<td>Graduate (Master’s) degree</td>
<td>19.0</td>
<td>24</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>4.0</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Percentage (%)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>African</td>
<td>0.8</td>
<td>1</td>
</tr>
<tr>
<td>Asian</td>
<td>14.3</td>
<td>18</td>
</tr>
</tbody>
</table>
European 15,1 19  
North American 59,5 75  
South American  7,9 10  
Oceania 2,4 3  

**Frequency**  
< 2 times a week 21,4 27  
2 – 4 times a week 20,6 26  
5 – 7 times a week 19,0 24  
8 – 10 times a week 13,5 17  
> 10 times a week 25,4 32  

**Hours**  
< 1 hour per day 56,3 71  
1 – 2 hours per day 35,7 45  
3 – 4 hours per day 7,2 9  
> 4 hours per day 0,8 1  

**Measurements**  
With the exception of the constructs cause involvement and game-cause fit, which were measured using a bipolar scale, respondents were asked to rate each item on a five-point Likert scale (*1* = *strongly disagree* to *5* = *strongly agree*). All items are listed in appendix A.

Intention to play (*α* = .72) was measured with three items used by Lee (2009). Examples for these items are “I will frequently play Half the Sky Movement” and “I would be willing to recommend other people to play Half the Sky Movement”.

To address the elements of attitudinal beliefs, this study used three items to measure *attitude toward the game* (*α* = .90) adapted from Ajzen (1991). Examples of these items are “I like playing Half the Sky Movement” and “I think that playing Half the Sky Movement is a good leisure activity”. *Attitude toward helping other people* (*α* = .79) was measured with three items used by Webb, Green and Brashear (2000). Participants could indicate to what extend they agree on the following items “people should be willing to help others who are less fortunate” and “people should be more charitable toward others in society”.

Social influences were measured with two constructs. Three *subjective norm* (*α* = .92) items were drawn up with reference to the measuring items of Ajzen (1991) and included items such as “my friends believe I should play Half the Sky Movement” and “people who influence my behaviour think that I should play Half the Sky Movement”. *Perceived critical mass* (*α* = .86) was measured with three items used by Hsu (2004). Participants could indicate to what extend their friends are playing ‘Half the Sky Movement’ and if many people they communicate with play the game.
After removing one item of Ajzen’s (1991) three-item behavioural control scale, the resulting cronbach’s alpha turned out to be good ($\alpha = 71$) and included the following two items “playing Half the Sky Movement is entirely within my control” and “Half the Sky Movement is easy to play”.

Following Davis (1989), perceived usefulness ($\alpha = .77$) was measured with four items. Participants could indicate to what extend they agree with the statement that playing ‘Half the Sky Movement’ enables them to support a charitable cause or to what extend they believe that playing ‘Half the Sky Movement’ is useful for them as it raises awareness of real-world problems.

To address the elements of perceived effectiveness ($\alpha = .84$) this study used four items adapted from Sargeant and Lee (2004) and Webb, Green and Brashear (2000). Examples of these items are: “I believe that the money donated through gameplay arrives at the persons in need” and “I am convinced that not much of the money donated through gameplay is wasted”.

Perceived enjoyment ($\alpha = .79$) was measured with three items adapted from Agarwel and Karahanna (2000) and included items such as “playing Half the Sky Movement provides me with a lot of enjoyment” and “I have fun playing Half the Sky Movement”.

The warm glow ($\alpha = .87$) construct was measured with three items identified from prior studies in the context of CRM (e.g., Arora & Henderson (2007); Andreoni (1989)) Participants could indicate to what extend they feel good when they play ‘Half the Sky Movement’, because they do not only game for their own enjoyment but also to support a charitable cause and to what extend they feel comfortable if they unlock a donation for a good cause by playing ‘Half the Sky Movement’.

For the cause involvement scale ($\alpha = .81$), the researcher followed Grau and Folse (2007) and chose a bipolar scale with four items, such as “the designated cause in the game is an unimportant cause to me vs. is an important cause to me”, and “the designated cause in the game is personally irrelevant to me vs. is personally relevant to me”.

Social interaction ($\alpha = .86$) was measured with four items from Choi and Kim (2004) and Lee (2009). Participants could indicate to what extend they perceive that communicating with other is useful for playing ‘Half the Sky Movement’ and to what extend they agree with the statement that cooperating with others makes ‘Half the Sky Movement’ more enjoyable.

To address the game-cause fit ($\alpha = .93$), this study followed Lafferty, Goldsmith and Hult (2004), and Simmons and Becker-Olsen (2006) who used a bipolar scale with four items. Participants could indicate how they perceive the fit between the game and the charitable
cause presented in the game. Examples of these items are low fit vs. high fit or inconsistent vs. consistent.

Four items used by Buchanan, Paine, Joinson and Reips (2007), and Metzger (2004) measured the construct of perceived privacy ($\alpha = .73$) and included items such as “I am confident that I know all the parties who collect the information I provide while playing Half the Sky Movement’, and “I am not concerned that the information I submitted on Half the Sky Movement could be misused”.

And the last construct of perceived altruism ($\alpha = .74$) was measured with three items adapted from Nowak (2004), Strahilevitz (2003), and Webb, Green and Brashear (2000). Participants could indicate to what extend they believe that the game is an honest effort to make a contribution to a charitable cause or that the producers of ‘Half the Sky Movement’ conduct the game in order to do a good deed.

RESULTS

Descriptive statistics

The means and standard deviation from each of the variables are reported in table 2. The mean values indicated that the participants tended to give positive considerations to game and cause specific variables. In particular, the five constructs attitude toward helping other people ($M = 4.69$, $SD = .47$), game-cause fit ($M = 4.48$, $SD = .73$), cause involvement ($M = 4.45$, $SD = .69$), warm glow ($M = 4.44$, $SD = .63$) and behavioural control ($M = 4.41$, $SD = .64$) showed very high average values. The means for social influences, including perceived critical mass ($M = 2.74$, $SD = 1.03$), subjective norm ($M = 3.18$, $SD = 0.94$), and social interaction ($M = 3.08$, $SD = .96$) on the other hand tended to be moderate. Using one-way ANOVA no statistically significant differences were found between players with a different nationality. A feasible explanation for this finding could be that the number of respondents was not evenly distributed among the groups. However, a comparison between the mean values of the independent variables per nationality revealed first interesting insights. The construct attitude toward the game had an average mean value of 4.36 ($SD = .66$). Participants from Oceania ($M = 4.56$, $SD = .77$) and North America ($M = 4.52$, $SD = .48$) tended to give substantially higher values than the average mean. Concerning users intention to play, participants from North America showed the highest mean value ($M = 4.31$, $SD = .57$), whereas the mean value for European participants was the lowest ($M = 3.78$, $SD = 1.00$). Table 2 provides a full description of the findings.
Table 2
Means and standard deviations (SD) for each variable, divided among nationalities (N= 126)

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Total</th>
<th>African (N=1)</th>
<th>Asian (N=18)</th>
<th>European (N=19)</th>
<th>North America (N=75)</th>
<th>South America (N=10)</th>
<th>Oceania (N=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>PU</td>
<td>4.14</td>
<td>.68</td>
<td>4.25</td>
<td>-</td>
<td>4.00</td>
<td>.57</td>
<td>3.89</td>
</tr>
<tr>
<td>PE</td>
<td>4.01</td>
<td>.72</td>
<td>3.25</td>
<td>-</td>
<td>3.79</td>
<td>.59</td>
<td>3.61</td>
</tr>
<tr>
<td>PEN</td>
<td>4.20</td>
<td>.69</td>
<td>4.67</td>
<td>-</td>
<td>3.94</td>
<td>.73</td>
<td>4.04</td>
</tr>
<tr>
<td>WG</td>
<td>4.44</td>
<td>.63</td>
<td>4.67</td>
<td>-</td>
<td>4.26</td>
<td>.74</td>
<td>4.26</td>
</tr>
<tr>
<td>SI</td>
<td>3.08</td>
<td>.96</td>
<td>5.00</td>
<td>-</td>
<td>3.42</td>
<td>.87</td>
<td>2.93</td>
</tr>
<tr>
<td>CI*</td>
<td>4.45</td>
<td>.69</td>
<td>4.00</td>
<td>-</td>
<td>4.10</td>
<td>.72</td>
<td>4.18</td>
</tr>
<tr>
<td>PP</td>
<td>3.36</td>
<td>.76</td>
<td>4.00</td>
<td>-</td>
<td>3.29</td>
<td>.72</td>
<td>3.41</td>
</tr>
<tr>
<td>PA</td>
<td>4.23</td>
<td>.69</td>
<td>4.67</td>
<td>-</td>
<td>3.96</td>
<td>.74</td>
<td>3.84</td>
</tr>
<tr>
<td>GF*</td>
<td>4.48</td>
<td>.73</td>
<td>3.25</td>
<td>-</td>
<td>4.19</td>
<td>.74</td>
<td>4.18</td>
</tr>
<tr>
<td>AG</td>
<td>4.36</td>
<td>.66</td>
<td>4.33</td>
<td>-</td>
<td>4.19</td>
<td>.77</td>
<td>4.04</td>
</tr>
<tr>
<td>AH</td>
<td>4.48</td>
<td>.73</td>
<td>5.00</td>
<td>-</td>
<td>4.44</td>
<td>.57</td>
<td>4.67</td>
</tr>
<tr>
<td>SN</td>
<td>3.18</td>
<td>.94</td>
<td>4.33</td>
<td>-</td>
<td>3.11</td>
<td>1.00</td>
<td>2.81</td>
</tr>
<tr>
<td>PC</td>
<td>2.74</td>
<td>1.03</td>
<td>3.00</td>
<td>-</td>
<td>2.89</td>
<td>.85</td>
<td>2.60</td>
</tr>
<tr>
<td>BC</td>
<td>4.41</td>
<td>.64</td>
<td>4.00</td>
<td>-</td>
<td>4.08</td>
<td>.77</td>
<td>4.34</td>
</tr>
<tr>
<td>ITP</td>
<td>4.17</td>
<td>.70</td>
<td>5.00</td>
<td>-</td>
<td>4.02</td>
<td>.72</td>
<td>3.78</td>
</tr>
</tbody>
</table>

PU= perceived usefulness, PE= perceived effectiveness, PEN= perceived enjoyment, WG= warm glow, SI= social interaction, CI= cause involvement, PP= perceived privacy, PA= perceived altruism, GF= game-cause fit, AG= attitude toward the game, AH= attitude toward helping other people, SN= subjective norm, PC= perceived critical mass, BC= behavioural control, ITP= intention to play

Note. Variables were measured on five-point Likert scales where 1 represents low scores and 5 high scores. *Constructs were measured with a bipolar scale.

Hierarchical Multiple Regression Analysis
In order to test the hypothetic research model hierarchical multiple regression analysis was employed. First, constructs from the TPB were entered into the multiple regression analysis, then intrinsic and extrinsic motivational factors were added, and finally the three moderator variables were included in the regression. Table 3 summarizes the contribution that each predictor makes at each step of the hierarchical multiple regression analysis.
**Step 1: Regressing the theory of planned behaviour**

The first equation of the hierarchical multiple regression analysis served to test whether attitudinal beliefs, social influences and behavioural control are significant predictors of the intention to play. The constructs accounted for significant 63% of the variance in the intention to play ($R^2 = .63$, $F (5, 120)= 39.96$, $p= .00$). The results of the unstandardized (B) and standardized ($\beta$) regression coefficients for each predictor are summarized in table 3, model 1.

**Step 2: Regressing the intention to play on the motivational factors**

On step 2, the intrinsic (perceived enjoyment, warm glow, social interaction and cause involvement) and extrinsic (perceived usefulness and perceived effectiveness) motivational factors were added to the regression equation. The results revealed that the motivational factors accounted for an additional significant 7% of the variance in the intention to play ($\Delta R^2 = .07$, $\Delta F (6, 114)= 4.57$, $p= .00$). Taken together the two models explained 70% of the variance in intention to play ($R^2 = .70$, $F (11, 114)= 23.90$, $p= .00$). The results of the unstandardized (B) and standardized ($\beta$) regression coefficients for each predictor are summarized in table 3, model 2.

**Step 3: Regressing the moderator variables on the relationship between the motivational factors and the dependent variable**

In the final equation, the three moderator variables (perceived altruism, game-cause fit and perceived privacy) were added. Results indicated that the variables accounted for an additional 7% of the variance in the intention play. However, the increase was non significant ($\Delta R^2 = .07$, $\Delta F (18, 96)= 1.49$, $p= .11$).

Table 3

Results of the hierarchical multiple regression analysis for variables predicting users’ intention to play social impact games ($N=126$)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1 Theory of Planned Behaviour</th>
<th>Model 2 Motivational Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Attitude toward the game</td>
<td>.60</td>
<td>.08</td>
</tr>
<tr>
<td>Attitude toward helping</td>
<td>-.02</td>
<td>.09</td>
</tr>
<tr>
<td>other people</td>
<td>.12</td>
<td>.06</td>
</tr>
</tbody>
</table>
As can be seen in table 3, the constructs attitude toward the game, perceived usefulness and perceived enjoyment are the only significant predictors of the intention to play in the final regression model 2. Perceived enjoyment showed the greatest effect on the intention to play ($\beta = .34, t= 3.89, p= .00$), thereby confirming hypothesis 4. The results also stressed the vital role of the attitude toward the game ($\beta = .21, t= 2.01, p= .05$) and hypotheses 1a was supported. Additionally, the model found that perceived usefulness is a significant predictor of users’ intention to play ($\beta = .20, t= 2.63, p= .01$), hence confirming hypothesis 5. These results suggest that players are more likely to have the intention to play ‘Half the Sky Movement’ if they have a favourable attitude toward the game, enjoy playing and perceive it as useful. Contrary to expectations, the hypothesized direct effects concerning social influences (H2), behavioural control (H3), perceived effectiveness as extrinsic motivational factor (H8), and cause involvement (H6), the warm glow effect (H7), and social interaction (H10) as intrinsic motivational factors were non significant. Adding the hypothesized interaction effects with the three moderator variables (perceived altruism, perceived privacy, and game-cause fit) did not reveal significant results and hence hypotheses 9, 11 and 12 were rejected.

**DISCUSSION**

The goal of this study was to develop a theoretical framework that explains the driving forces contributing to users’ behavioural intention to play social impact games. For this purpose, the present study developed a research model describing attitudinal beliefs, behavioural control, social influences, motivational factors and game features, which derived from literature review and qualitative research. The proposed model was then tested by using hierarchical multiple regression analysis. To the knowledge of the author, this study is the first one to
investigate users’ intention to play social impact games. Overall, the results showed that the model has good analytical and explanatory power to explain behavioural intentions in social impact games. With $R^2$ of 70% the research model can serve as a robust framework for social impact game studies in the future. However, of 14 factors included in the final research model only three constructs, namely attitude toward the game, perceived usefulness and perceived enjoyment proved to be significant and therefore accounted for the 70% of the variance in the intention to play. It is particularly notable that the three constructs all derive from the field of online and social network games. Whereas factors related to the good cause, which were identified in the qualitative study and had a significant impact on amongst other things, consumers’ purchase decision or their willingness to pay for CRM products in previous studies (e.g., Koschate-Fischer et al., 2012), proved to be non significant and did not impact players’ intention to play ‘Half the Sky Movement’. It can thus be concluded that playing an online game and making a contribution to a good cause (still) are two different things. The following paragraph will shed light on the respective results in greater detail.

Research results revealed that attitude toward the game is a strong predictor and plays a significant role in shaping users’ intention to play ‘Half the Sky Movement’. In other words, the large and positive relationship indicates that players who reported more positive attitudes also reported stronger intentions to play ‘Half the Sky Movement’. This finding is consistent with established behaviour theories that emphasize the role of attitudinal beliefs in predicting behaviour (e.g. Ajzen, 1991, Davis, 1989).

Another strong consensus with prior studies was found with regard to the prominent role of players’ perceived enjoyment. Online and social network games have been purely for entertainment and provide an easy way to pass the time. This is supported in the studies of Hsu and Lu (2005) or Lee (2009) who both found that the construct has a significant influence on players’ attitude and their intention to play. In other words, if players would not enjoy playing an online game, they were unlikely to actually play it. In addition to providing entertainment, enjoyment and relaxation, social impact games as a new genre of social network games aim to fulfil another purpose. They intend to bring social issues from around the world into players’ room through the interactive and entertaining use of online games. The findings of the present study, however, revealed that for players of ‘Half the Sky Movement’ these additional motivations were not among the crucial reasons to play the game. Users’ intention to play the game was rather most influenced by the perceived enjoyment. Therefore, social impact game developers should put emphasis on creating an interactive,
engaging and entertaining gaming experience that stimulates and drives users’ engagement for designated causes.

Furthermore, the data supported the relevance of an extrinsic motivational factor, which proposed that the intention to play social impact games is stronger when players’ perceived usefulness is stronger. Prior research findings on the effect of perceived usefulness in the context of online and social network games showed varied, even contradictory results (e.g., Chang & Chin, 2011; Lin & Lu, 2011; Shin & Shin, 2011). Shin and Shin (2011) argued that as SNGs have various unique features users might want to see clearer motivations than those suggested by the concept of perceived usefulness. This was, however, not the case in the present study. Results revealed that players of ‘Half the Sky Movement agreed that the game would enhance their personal productivity in supporting a charitable cause. A feasible explanation for that finding could be that social impact games in contrast to other SNGs have clear and defined objectives (in addition to providing a fun and engaging gaming experience), which enables players to use the game advantageously and to enhance their own personal productivity.

Discussion of rejected research hypotheses
Not all hypothesized relationships between the variables depicted in the research model could be established from the data. In contrast to related studies in the field of SNGs (e.g., Chang, 2012; Lee, Lee & Choi, 2012), the present study could not detect evidence for the impact of social influences. Against expectations the results of the present study revealed that subjective norm, perceived critical mass and social interaction did not influence users’ intention to play ‘Half the Sky Movement‘. In other words, maintaining and building relationships, getting support from others and the behaviour of players’ social environment did not affect their initial intention to play. A possible explanation for these findings is that ‘Half the Sky Movement’ emphasizes donation mechanics over social mechanics and did not enable players’ to interact with each other during gameplay.

With reference to the non significant linear relationships between users’ intention to play and the warm glow effect, attitude toward helping other people, and cause involvement it is interesting to note that the three constructs all have been adapted from the field of cause-related marketing. Findings of the present study suggest that the effects of the donation-related customer predispositions (attitude toward helping other people and the warm glow motive) and the cause-related customer predisposition (cause involvement), which have been identified in prior CRM studies cannot be transferred and adapted to the gaming context. With
reference to the construct attitude toward helping other people a feasible explanation for the contradictory results of this study is that players’ of ‘Half the Sky Movement‘ want to see more specific motivations than those generic motivations suggested by attitude toward helping other people. The non significant effect of the warm glow motive can possibly be attributed to the strong and highly significant impact of another intrinsic motivational factor, namely players’ perceived enjoyment. It is reasonable to assume that the fun and enjoyment players receive from playing outweighed the good feeling received from pro-social behaviour. Surprisingly, results further showed that the effect of cause involvement was non significant. The most feasible explanation for this finding is related to remarks made by Koschate-Fischer et al. (2012) who stated that cause-related consumer predispositions, such as cause involvement are cause-specific and differs between consumers and campaigns. As a consequence, it is reasonable to assume that results might be different for other social impact games.

Furthermore, this study contributed to the body of knowledge regarding the moderating effects of game features. It was assumed that perceived altruism, perceived privacy and game-cause fit would moderate the relationship between the motivational factors and the intention to play. Although the variables added to the explained variance in the intention to play the effects were non significant. Related to this point, it is striking that two constructs (perceived altruism and game-cause fit) both have its origin in the traditional cause-related marketing literature. As mentioned before, this finding might be due to the fact that players of ‘Half the Sky Movement‘ have limited or no experience with social impact games and although they experienced the game as fun and entertaining they did not get actively involved with the social cause presented in the game. After all, it remains an open question to what degree people want to play a game that focuses on a social issue.

**IMPLICATIONS**

The results highlight several theoretical and practical implications for social impact game researchers and developers. From a theoretical point of view, the present study contributes to the understanding of user behaviours associated with social impact games. While future studies should further investigate this new genre of social network games, the theoretical contribution of this study lies in the exploration of social impact game-specific factors. It extends previous work on online and social network games and provides further insights into factors derived from cause-related marketing research. Initial evidence was found that social impact game developers should focus on providing a fun and engaging gaming experience
that stresses the personal advantage, which players receive from playing the game. Furthermore, the presentation of ‘Half the Sky Movement’ on the SNS Facebook has been found to be very effective in reaching the targeted audience, as the game has reached over 780,000 players, received over 9,000 likes and hundreds of comments and shared pictures within three months after the game was launched. Facebook is a highly competitive space to release a game, but social impact game developers should meet the challenges in terms of technical and production scope, as SNGs offer a wide new range of opportunities for user entertainment and engagement.

LIMITATIONS
The present study comprises the following limitations. First of all, it should be considered that the present study was conducted on the basis of a single case study analysis and the results are building on players’ perception of ‘Half the Sky Movement’. User expectations and experiences may differ for other social impact games. Secondly, the sample comprised over 90% women. The most feasible explanation for that may be that the game revolved around an Indian women and the progression of the game focussed on opportunities for women and girls in terms of economic empowerment and access to education and men might have felt left out or even blamed. The last limitation to be mentioned refers to the sample size, which was relatively small considering the total amount of players (778,000) three month after the launch of the game.

FUTURE RESEARCH
The present study provides a strong fundamental basis for future research. This study was to the knowledge of the author the first that conducted research on the driving forces of users’ intention to play social impact games. Therefore, the results of this study provide first promising results. Social impact games are a very unique and innovative way of presenting social problems and the question remains whether these games will actually work in attracting attention to social issues. As described earlier, the present study examines a single case study and sheds light on users’ intention to play ‘Half the Sky Movement’. In order to identify cross-game criteria, future research should expand the scope of analysis and examine other existing social impact games.

Findings of the present study provide indications that users’ intention to play social impact games might be affected by cultural differences. Future research should further investigate this phenomenon. As the concept of cause-related marketing originates from the
USA it is reasonable to assume that the general acceptance and enthusiasm among the US population to get involved with social impact games is higher than in other countries. More research is needed to provide clarity in this matter.

As mentioned above, ‘Half the Sky Movement‘ did not enable players’ social interaction. Therefore it did not take into account another intrinsic motivational factor that requires the interaction of others in the game play, namely status. Further research should examine to what extent this construct influences users’ intention. It can be assumed that status might play an important role as social impact games provide tasks and challenges for players (e.g., to unlock a free donation) which support peoples’ feelings of competence, which they are likely to show to their friends. In fact, status might reinforce players’ donation behaviour. Again, more research is needed to provide clarity in this matter.

A last matter of interest would be to further examine if and to what extent players are willing to make personal financial contributions in addition to unlock free donations from corporate sponsors within social impact games. Players are able to move through the game even faster by putting up their own money to NPOs. One of the declared aims of the producer of ‘Half the Sky Movement’ was to persuade 2- to 5-million players to sign up for free and that at least five percent of those would donate (Fastcompany, 2013). It would be very interesting to find out if social impact games actually affect peoples’ giving behaviour.
REFERENCES


doi:10.1111/j.1467-8535.2005.00521.x


Strahilevitz, M. (2003). The effects of prior impressions of a firm’s ethics on the success of a cause-related marketing campaign: Do the good look better while the bad look worse? *Journal of Nonprofits and Public Sector Marketing, 11*(1), 77-92,


APPENDIX

Appendix A. Survey Instrument

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Measure items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived usefulness</td>
<td>PU_1: Playing Half The Sky Movement enables me to support a charitable cause.</td>
<td>Davis, 1989</td>
</tr>
<tr>
<td></td>
<td>PU_2: I think that it is useful for me to play Half The Sky Movement as it raises awareness of real-world problems.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU_3: Playing Half The Sky Movement improves my efficiency in making a charitable donation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU_4: Playing Half The Sky Movement enables me to learn more about societal problems.</td>
<td></td>
</tr>
<tr>
<td>Perceived effectiveness</td>
<td>PE_1: I believe that the money donated through gameplay arrives at the persons in need.</td>
<td>Sargeant and Lee, 2004; Webb, Green and Brashear, 2000</td>
</tr>
<tr>
<td></td>
<td>PE_2: I am convinced that not much of the money donated through gameplay is wasted.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PE_3: I assume that the money donated through gameplay will be distributed in favour of the designated cause.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PE_4: I trust in the fact that the money donated through gameplay will be used for the cause.</td>
<td></td>
</tr>
<tr>
<td>Perceived enjoyment</td>
<td>PEN_1: Playing Half The Sky Movement provides me with a lot of enjoyment.</td>
<td>Agarwal and Karahanna, 2000</td>
</tr>
<tr>
<td></td>
<td>PEN_2: I have fun playing Half The Sky Movement.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEN_3: Playing Half The Sky Movement bores me.</td>
<td></td>
</tr>
<tr>
<td>Warm glow</td>
<td>WG_1: When I play Half The Sky Movement I feel good because I do not only game for my own enjoyment but also to support a charitable cause.</td>
<td>Arora and Henderson, 2007; Andreoni, 1989</td>
</tr>
<tr>
<td></td>
<td>WG_2: I feel comfortable, if I unlock a donation for a good cause by playing Half The Sky Movement</td>
<td></td>
</tr>
</tbody>
</table>
**Social interaction**

**SI_1**: Communicating with others is useful for playing Half The Sky Movement.

**SI_2**: Cooperating with others makes Half The Sky Movement more enjoyable.

**SI_3**: I am playing Half The Sky Movement to feel like I belong to a group.

**SI_4**: Playing Half The Sky Movement enables me to make new friends.

**Cause Involvement**

The designated cause in the game…

**CI_1**: is an unimportant cause to me vs. is an important cause to me.

**CI_2**: means nothing to me vs. means a lot to me.

**CI_3**: is personally irrelevant to me vs. is personally relevant to me.

**CI_4**: doesn’t matter a great deal to me vs. does matter a great deal to me.

**Perceived privacy**

**PP_1**: I am confident that I know all the parties who collect the information I provide while playing Half The Sky Movement.

**PP_2**: I am aware of the exact nature of information that will be collected during the play of Half The Sky Movement.

**PP_3**: I am not concerned that the information I submitted on Half The Sky Movement could be misused.

**PP_4**: I believe there is an effective mechanism to address any violation of the information I provide to Half The Sky Movement.
Perceived altruism

**PA_1:** The game Half The Sky Movement is an honest effort to make a contribution to a charitable cause.

Nowak, 2004; Strahilevitz, 2003; Webb, Green and Brashear, 2000

**PA_2:** I believe that the producers of Half The Sky Movement conduct the game in order to do a good deed.

**PA_3:** The producers of Half The Sky Movement are not truly committed to the purpose of the donation.

Game-Cause fit

How do you perceive the fit between the game and the charitable cause presented in the game?

**GF_1:** Low fit vs. high fit

Lafferty, Goldsmith and Hult, 2004; Simmons and Becker-Olsen, 2006

**GF_2:** Inconsistent vs. consistent

**GF_3:** Not complementary vs. complementary

**GF_4:** Does not make sense vs. does make sense

Attitude toward helping other people

**AG_1:** I feel good about playing Half The Sky Movement.

Ajzen, 1991

**AG_2:** I like playing Half The Sky Movement.

**AG_3:** I think that playing Half The Sky Movement is a good leisure activity.

Attitude toward helping other people

**AH_1:** People should be willing to help others who are less fortunate.

Webb, Green and Brashear, 2000

**AH_2:** Helping troubled people with their problems is very important to me.

**AH_3:** People should be more charitable toward others in society.

Subjective norm

**SN_1:** My friends believe I should play Half The Sky Movement.

Ajzen, 1991

**SN_2:** People who influence my behaviour think that I should play Half The Sky Movement.

**SN_3:** People who are important to me would think that playing Half The Sky Movement is a good idea.
**Perceived critical mass**  
**PC_1:** Many people I communicate with play *Half The Sky Movement*  
**PC_2:** My friends are playing *Half The Sky Movement*.  
**PC_3:** The people I know playing *Half The Sky Movement* will continue to play it in the future.

**Behavioural control**  
**BC_1:** Playing *Half The Sky Movement* is entirely within my control.  
**BC_2:** *Half The Sky Movement* is easy to play.  
**BC_3:** Whether or not I play *Half The Sky Movement* is not up to me. (Item has been deleted during analysis)

**Intention to play**  
**ITP_1:** I will frequently play *Half The Sky Movement*.  
**ITP_2:** I would be willing to recommend other people to play *Half The Sky Movement*.  
**ITP_3:** It’s worth playing *Half The Sky Movement*.

---

Hsu, 2004

Ajzen, 1991

Lee, 2009
Appendix B: Survey

UNIVERSITEIT TWENTE.

Dear respondent,

My name is Julia Wuebbe and I am doing research for my master's degree in Corporate Communications at the University of Twente in the Netherlands. This study is part of my thesis and focuses on determining factors that influence people's intention to play 'Half The Sky Movement'.

Your opinion is highly valuable and I would be very grateful if you could take part in this survey by completing the questionnaire below. This will take you about 5 minutes.

They survey is completely anonymous and all information will be treated with confidentiality.

Thank you very much for your participation! If you have any questions, please feel free to contact me.

Sincerely,

Julia Wuebbe
j.wubbe@student.utwente.nl
1. What is your gender?
- Female
- Male

2. What is your age?
- [Please choose] :

3. What is the highest level of education that you have completed?
   If currently enrolled, highest degree received.
- Some high school
- High school diploma
- Some college
- Bachelor's degree
- Some graduate school
- Graduate (Master's) degree
- Doctoral degree
- Other
4. What is your nationality?

- African
- Asian
- European
- North American
- South American
- Oceania

5. How many times on average have you been playing ‘Half The Sky Movement’ during the last weeks?

- < 2 times a week
- 2 – 4 times a week
- 5 – 7 times a week
- 8 – 10 times a week
- > 10 times a week

6. How many hours on average do you play ‘Half The Sky Movement’ per day?

- < 1 hour per day
- 1 – 2 hours per day
- 3 – 4 hours per day
- > 4 hours per day
1. In the following section, you find statements about motives for playing ‘Half The Sky Movement’.

Please read the statements carefully and indicate to what extent you agree or disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neither agree nor disagree</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playing ‘Half The Sky Movement’ enables me to support a charitable cause.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that it is useful for me to play ‘Half The Sky Movement’ as it raises awareness of real-world problems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing ‘Half The Sky Movement’ improves my efficiency in making a charitable donation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing ‘Half The Sky Movement’ enables me to learn more about societal problems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe that the money donated through gameplay arrives at the persons in need.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am convinced that not much of the money donated through gameplay is wasted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I assume that the money donated through gameplay will be distributed in favor of the designated cause.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I trust in the fact that the money donated through gameplay will be used for the cause.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing ‘Half The Sky Movement’ provides me with a lot of enjoyment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing ‘Half The Sky Movement’ bores me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have fun playing ‘Half The Sky Movement’.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. In the following section, you find statements about motives for playing ‘Half The Sky Movement’.
Please read the statements carefully and indicate to what extent you agree or disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neither agree nor disagree</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I play ‘Half The Sky Movement’ I feel good because I do not only game for my own enjoyment but also to support a charitable cause.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel comfortable if I unlock a donation for a good cause by playing ‘Half The Sky Movement’.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am pleased that I do not only enjoy playing ‘Half The Sky Movement’ but that I do a good deed at the same time.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Communicating with others is useful for playing ‘Half The Sky Movement’.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Cooperating with others makes ‘Half The Sky Movement’ more enjoyable.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am playing ‘Half The Sky Movement’ to feel like I belong to a group.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Playing ‘Half The Sky Movement’ enables me to make new friends.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

2. The designated cause in the game...

<table>
<thead>
<tr>
<th>Rating</th>
<th>is an unimportant cause to me</th>
<th>is an important cause to me</th>
<th>means nothing to me</th>
<th>means a lot to me</th>
<th>is personally irrelevant to me</th>
<th>is personally relevant to me</th>
<th>does not matter a great deal to me</th>
<th>does matter a great deal to me</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>-1</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>0</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>+1</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>+2</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
</tbody>
</table>

Julia Wuebbe, Master student | E-mail j.wuebbe@student.utwente.nl | Faculty of Behavioral Sciences | University of Twente | P.O. Box 217, 7500 AE Enschede
1. The following statements deal with features of ‘Half The Sky Movement’. Please read the statements carefully and indicate to what extent you agree or disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neither agree nor disagree</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am confident that I know all the parties who collect the information I provide while playing ‘Half The Sky Movement’.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am aware of the exact nature of information I submitted on ‘Half The Sky Movement’.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am not concerned that the information I submitted on ‘Half The Sky Movement’ could be misused.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe there is an effective mechanism to address any violation of the information I provide to ‘Half The Sky Movement’.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The game ‘Half The Sky Movement’ is an honest effort to make a contribution to a charitable cause.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe that the producers of ‘Half The Sky Movement’ conduct the game in order to do a good deed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The producers of ‘Half The Sky Movement’ are not truly committed to the purpose of the donation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How do you perceive the fit between ‘Half The Sky Movement’ and the charitable cause presented in the game?

<table>
<thead>
<tr>
<th>Fit Level</th>
<th>Low fit</th>
<th>Inconsistent</th>
<th>Not complementary</th>
<th>Does not make sense to me</th>
<th>High fit</th>
<th>Consistent</th>
<th>Complementary</th>
<th>Does make sense to me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. In the following section, you find statements about your experiences with ‘Half The Sky Movement’.
Please read the statements carefully and indicate to what extent you agree or disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neither agree nor disagree</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel good about playing ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I like playing ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I think that playing ‘Half The Sky Movement’ is a good leisure activity.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People should be willing to help others who are less fortunate.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Helping troubled people with their problems is very important to me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People should be more charitable towards others in society.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My friends believe I should play ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People who are important to me think that playing ‘Half The Sky Movement’ is a good idea.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People who influence my behavior think that I should play ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Many people I communicate with play ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My friends are playing ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The people I know playing ‘Half The Sky Movement’ will continue to play it in the future.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Playing ‘Half The Sky Movement’ is entirely within my control.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>‘Half The Sky Movement’ is easy to play.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Whether or not I play ‘Half The Sky Movement’ is not up to me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I will frequently play ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I will recommend other people to play ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>It’s worth playing ‘Half The Sky Movement’.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Thank you for participating!

Julia Wuebbe, Master student | E-mail j.wubbe@student.utwente.nl | Faculty of Behavioral Sciences | University of Twente | P.O. Box 217, 7500 AE Enschede