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Who's got my back? Comparing consumers' reactions to peer-provided and firm-provided customer support

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Abstract

This study demonstrates that when an individual encounters a product-related problem, fellow consumers (i.e., one's peers) have a unique advantage in providing social support to the affected consumer. Specifically, we find that social support can be a dominant driver of consumer satisfaction when the risk of customer defection is at its highest (i.e., following an unsuccessful attempt to solve the consumer's problem). Using real-world data from an online support community, a pilot study finds that if the problem that a consumer faces goes unsolved, satisfaction is greater when consumers receive peer-provided versus firm-provided support. Study 1 replicates this finding in a controlled experiment that realistically simulates an actual customer support incident in real-time. Study 2 identifies social support as the mechanism that underlies this effect and investigates whether firm employees can take steps to appear more customer-like and thereby replicate the advantage of peer-provided support. Finally, Study 3 reveals an alternative strategy (i.e., utilizing multiple employees) that firms can use to enhance social support and provides evidence that peer-provided support not only enhances satisfaction but also positively influences consumers' behavioral intentions.

KEYWORDS
cocreation, customer support, problem-solving, satisfaction, social support

1 | INTRODUCTION

Firms make significant investments to ensure that the products they offer to consumers are intuitive, easy to use, and reliable.[1] Despite firms' best efforts, at some point in time, most customers will experience difficulty using the products they have purchased. Traditionally, consumers have looked to firms to provide them with assistance when they encounter such problems. Recently, however, consumers themselves have begun to play a more active role in providing customer support directly to their peers. For example, in 2018 when a software glitch prevented iPhone users from ending a

FaceTime call, 5,564 individuals requested assistance via the Apple Support Community website. In this case, help came from a fellow customer known as Julieda, who shared a solution to this problem with other affected users. We call this type of support, in which one user assists another by providing relevant, solution-focused knowledge, *peer-provided support*.

Interest in peer-provided support is clearly growing, as demonstrated by the increasing number of firms that have created large-scale online support forums that encourage knowledgeable consumers to offer assistance to their less-skilled fellow users. For example, according to a recent Forrester report, the percentage of firms using online forums/online communities grew rapidly in the space of just a few years, jumping from 31% in 2012 to 56% in 2015 (Leggett, Powers, Ephraim, & Harrison, 2016). Moreover, emerging evidence suggests that peer-provided support can play an important role in helping firms to achieve the dual goals of reducing their

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[1]For simplicity, throughout this paper we refer to marketing offerings as "products," although we recognize that the same kinds of usage issues we describe are also quite common in the services domain. Hence, we believe that the concepts of peer-provided and firm-provided customer support are equally applicable and generalizable to both product- and service-based contexts.

support costs and continuing to offer high-quality customer support to customers (Bone, Fombelle, Ray, & Lemon, 2015; Cook, 2008; Dholakia, Blazevic, Wiertz, & Algesheimer, 2009). Despite firms' growing interest in utilizing customers in their online support efforts, extant research currently provides few insights about how consumers who receive support from their peers evaluate it compared to the support they receive from the firm. In addition, even less is known about the specific steps that firms can take to maximize the value generated by their online support platforms.

The current research addresses this gap by focusing on three central research questions. First, when might peer-provided support have an advantage over firm-provided support in terms of generating enhanced satisfaction? Second, if a preference for peer-provided support does exist in certain cases, what mechanism underlies this effect? Third, how can insights into this underlying mechanism help firm employees provide better customer support? By addressing these questions, we contribute to the services and customer support literature by comparing two popular modes of online support (i.e., firm-provided vs. peer-provided support), uncovering the psychological differences consumers experience when exposed to each type of support, and theoretically explaining and testing key facets of social support that as of yet have gone unexplored.

Across four studies, using both real-world data from an online support community as well as controlled experiments, the current research shows that peer-provided support generates greater satisfaction than firm-provided support in cases when the support attempt cannot successfully resolve the problem that the customer faces. Moreover, this study identifies social support as the mechanism that underlies this effect. Importantly, we also provide valuable guidance for practitioners by identifying two managerially actionable strategies that firms can use to maximize the value of their online support platforms. Specifically, this study shows that firms that take steps to make their employees appear more customer-like or firms that utilize multiple employees when responding to a product-related problem can enhance consumers' sense of social support, increase satisfaction, and replicate the advantage of peer-provided support in the case of an unresolved outcome.

2 | CONCEPTUAL BACKGROUND AND HYPOTHESES

When an individual experiences a customer support issue, clearly actions are required to address the underlying problem and enable the customer to use the product as they intended. However, we argue that in addition to this *functional support* element (i.e., has the focal product-related problem been resolved?), effective customer support also requires a *social support* element to help address the negative psychological state (Gelbrich, 2010; Laros & Steenkamp, 2005; Nyer, 2000; Richins, 1987) that often accompanies such a problem. We define social support as the perception that one is cared for within a social network, feels a sense of community and friendliness, and has a positive association with said network

(Burroughs & Eby 1998; McColl-Kennedy & Sparks, 2003; Taylor et al., 2004.) Social support represents a more holistic positive perception by the consumer of a particular community and the characteristics of the interpersonal relationships that exist among its members. In the context of customer support, a sense of social support can arise from the social connectedness with the support provider, as well as from a general sense of community (Smith, Bolton, & Wagner, 1999; Tax, Brown, & Chandrashekaran, 1998). Although both functional and social support are important components in the support provision process, we suggest that social support becomes particularly important in the absence of functional support.

2.1 | The customer as support provider

As one might expect, much of the existing services literature assumes that the firm serves as the primary provider of customer support (Gronroos, 1988; Tax et al., 1998). For example, a large body of prior research suggests that when a firm provides an inadequate response to a service failure incident, customers' satisfaction (i.e., the degree to which they like or feel favorable about a focal service encounter or solution; Crosby & Stephens, 1987) decreases and their propensity to defect and/or retaliate against the service-providing firm increases (Chang, 2006; Grégoire, Tripp, & Legoux, 2009; McColl-Kennedy & Sparks, 2003; Obeidat, Xiao, Iyer, & Nicholson, 2017). However, recent research and practice offer an expanded view that recognizes the active role that consumers often play in providing customer support to their peers. Indeed, a small but growing body of research has recognized that customers have the ability to solve a wide variety of problems (Mathwick, Wiertz, & De Ruyter, 2008; Wasko & Faraj, 2005) and that consumers trust that their peers have the necessary skills to provide them with high-quality solutions (Bone et al., 2015; Cook, 2008; Dholakia et al., 2009). As such beliefs could have a significant influence on consumers' evaluations of a support encounter, we specifically measure whether consumers have similar expectations of employees and their peers in the experimental studies that follow.

In addition to high-quality functional support, prior research suggests that consumers may be particularly adept at providing social support to their peers and that peer-provided support is often perceived as highly credible, relevant, and empathetic (Bickart & Schindler, 2001; Butler, Sproull, Kiesler, & Kraut, 2002). Similarly, Mathwick et al., (2008) reveal that consumers who actively offer peer-provided support to their fellow customers do so not only to acquire valuable informational benefits (e.g., unfettered access to the collective knowledge that the community possesses) but also to obtain certain community-based social benefits (e.g., empathy and caring; Bickart & Schindler, 2001; Dholakia, Bagozzi, & Pearo, 2004). These social benefits that also include such things as camaraderie, a sense of belonging and a perceived sense of caring by other community members underlie our definition of social support.

Following prior research, we predict that when a customer support issue occurs, a customer will not only seek functional

support for the focal problem but will also expect to receive social support to cope with the negative affect that accompanies this problem. Specifically, we posit that in certain situations, peer-provided customer support may have an advantage in improving customers' psychological state via enhanced social support, and in this way, may result in greater overall satisfaction following a customer support problem.

Arguably, social support is most important when the consumer experiences a situation in which support is provided, but the solution offered is not sufficient to adequately address the problem at hand. Thus, we predict that when a supported attempt is unsuccessful, consumers are apt to be dissatisfied with the solution that was provided and will be more likely to require additional social support to make up for the inadequate functional resolution that they have experienced (Grégoire et al., 2009; Maxham & Netemeyer, 2002). In this case, peer-provided support will be perceived as being better able to offer social support compared to firm-provided support, and consequently, the increased sense of social support attributed to peer-provided support should result in enhanced consumer satisfaction (see Figure 1 for the proposed conceptual model). On the other hand, when the underlying problem is resolved, functional support dominates and one's need for social support is less pronounced. Hence, when a customer support attempt is successful, firm-provided and peer-provided support will yield similar positive results. Formally stated, we predict:

H1a: *When a support issue remains unresolved, peer-provided support results in greater satisfaction than firm-provided support.*

H1b: *When the support issue is resolved, satisfaction does not differ depending on the identity of the support provider.*

H2: *Consumers' sense of social support mediates the effect of support provider identity on satisfaction.*

2.2 | Social support from a shared experience with the support provider

One important source of social support may originate from an ability to relate to the support provider via a shared experience. Indeed, prior research indicates that consumers believe fellow users are better able to understand their problems and demonstrate empathy than firm employees (Bickart & Schindler, 2001; Dholakia et al., 2004). As an other-oriented emotional response, empathy stems from a comprehension of and an appreciation for another's condition (Eisenberg, 2002). Thus, in this context, a support provider's status as a fellow product user may form the basis for such a shared understanding. Similarly, it is likely that a support provider's status as a fellow user establishes in-group connections, which may further reinforce positive associations and favorable views of the support provider by the affected consumer (Brewer, 1979).

However, a support provider's identity as a user or as a firm employee may not be mutually exclusive. For example, in their online communications with customers, firm employees may choose to describe themselves as actual users of the firm's products. How
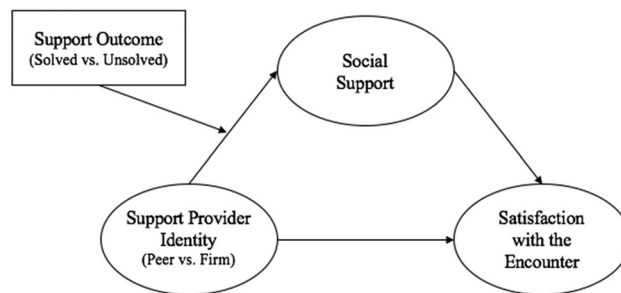

FIGURE 1 Conceptual model

would a support provider's dual role as both an employee and a user affect consumer satisfaction in a customer support context? In such a case, we predict that the enhanced social support felt by consumers in the peer- versus the firm-provided support condition is driven by a flexible understanding of the shared usage experience, rather than by a more rigid (i.e., binary) mental model that serves to categorize a support provider as either a fellow user or a firm employee. Hence, we argue that when the support provider communicates to the affected consumer that they are both a firm employee as well as an actual user of a given product, this will increase said consumer's sense of social support, and will lead to greater satisfaction. Following this logic, we predict:

H3: *When firm-provided support is offered by an employee who describes themselves as a user of the product, satisfaction is greater than when the employee is not identified as a product user, particularly when the support outcome is unsolved.*

2.3 | Social support from a general sense of community

Besides sharing an experience with a support provider via product usage, another potentially important source of social support stems from the sense that there is an active community of people who will come together to assist consumers in need. A sense of community is defined as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986). At the most fundamental level, communities are comprised of people, and as such, the belief that members can count on their peers for assistance in times of need is a central characteristic of both online and offline communities (Burgoon et al., 2000; Chan & Lee, 2010; Mathwick et al., 2008). Thus, compared to a support incident in which the affected customer receives help from only a single support provider, an incident in which multiple support providers (i.e., either multiple fellow users or multiple firm employees) come together to offer their assistance better represents the kind of collective action that characterizes a caring and supportive community. While the specific number of support providers may vary, the central element of this theory is that perceived social support is enhanced when the support provision shifts from a solitary interaction with a support provider to an

interaction with a group of support providers, who are working in concert to assist the affected consumer. We propose that compared with a single support provider, a collective effort involving multiple support providers can generate a greater sense of community, thereby increasing the customer's sense of social support and leading to greater satisfaction. Formally stated, we predict:

H4: *When firm-provided support is offered by a group of employees, satisfaction is greater than firm-provided support from a single employee, particularly when the support outcome is unsolved.*

3 | RESEARCH METHODOLOGY

3.1 | Pilot study

3.1.1 | Procedure and design

In this study, the authors acquired data about actual problems and problem-solving attempts from the online customer support community of a large cellular phone service provider. The data was derived from discussion threads taken from the online customer support forum between December 2012 and January 2014 (date of last activity). In collecting this data, the research team explicitly selected threads that indicated a need for a specific problem solution, as opposed to more general complaints or product-related comments. Following a request for support, support responses can be made by firm employees or by fellow customers. Hence, this support community serves as an ideal context in which to test our hypotheses.

In developing the sample, a concerted effort was made to isolate firm-provided support from peer-provided support (i.e., employees' posts were identified with the company's branded logo). In addition, discussion threads in which *both* employees and customers actively offered support were systematically excluded from the sample. In an effort to infer the focal customer's satisfaction following each problem-solving event, this study also focused on past discussion threads in which communication activity had already ceased and in which the customer requesting assistance returned to the thread to indicate whether or not the solution provided was sufficient to address the problem they experienced (e.g., thank you, this did the trick, it's still not working, etc.,).

To ensure that the problems for which customers requested assistance were equivalent between peers and employees, the threads were gathered from the wireless device support forum—a forum where either employees or customers have the ability to provide support to consumers who need it. In addition, we conducted a pretest using Amazon Mechanical Turk, ($N = 200$, $M_{Age} = 31.18$) in which participants read the original request for support from each of the threads that we gathered. Participants then rated the degree to which the support request represented a problem that was: (a) Difficult/easy to solve or (b) uncommon/common in terms of its occurrence. Results of the pretest confirmed that the support requests answered by firm employees were no more difficult and the problems were no less common than those answered by peers

and vice versa (difficulty: $M_{Firm} = 4.04$ vs. $M_{Peer} = 3.95$, $t < 1$, commonality: $M_{Firm} = 4.32$ vs. $M_{Peer} = 4.12$, $t(199) = 1.87$, $p > .05$). Finally, we contacted a firm employee/moderator of the online support community to determine whether there was a systematic method at play that influenced which questions were answered by an employee versus a customer. The firm's response indicated that there was no specific method involved.

Two independent research assistants identified 80 total discussion threads that met the criteria described above. Once the discussion threads were identified, coders, who were unaware of the aim of our research, reviewed and quantified each thread based on the identity of the support provider (firm-provided or peer-provided, inter-rater reliability = .77[2]) and support outcome (solved vs. unsolved). Support outcome was confirmed by icons and text in each forum thread that indicated whether the problem was classified as solved or unsolved according to user feedback and community moderation (inter-rater reliability = .70). We also measured satisfaction with the support encounter by inferring the valence of the language used by the customer who originally posted a request for assistance (1 = very negative, 5 = very positive, inter-rater reliability = .62, which lies within the range of substantial agreement strength per Landis & Koch, 1977). Some examples of positive satisfaction language include, "You're my hero!," "You are wonderful," and "I am quite happy with the service that I am getting." Once each thread was coded individually, the coders met to resolve any differences.

3.1.2 | Results

Of the 80 total discussion threads, 42 threads were identified as solved and 38 threads were identified as unsolved. χ^2 Analysis indicated that the solved and unsolved outcomes were equally present whether support was peer-provided or firm-provided ($\chi^2(1) = .89$, $p = .35$). The following analysis adopts a 2 (support provider: Firm-provided vs. peer-provided) × 2 (support outcome: Solved vs. unsolved) between-subjects design.

A 2 (support provider) × 2 (support outcome) analysis of variance (ANOVA) performed on satisfaction with the support encounter revealed a two-way interaction ($F(1,76) = 4.14$, $p < .05$). The main effect of support provider identity and support outcome on satisfaction was not significant ($ps > .2$). Means and planned contrast results for the significant interaction are included in Figure 2. As predicted, when the problem was unsolved, satisfaction with the encounter was greater when the user received peer-provided support as opposed to firm-provided support ($M_{Peer} = 3.13$, standard deviation [SD] = .21 vs. $M_{Firm} = 2.40$, $SD = .26$, $F(1,76) = 4.86$, $p < .05$). By contrast (and in line with our hypothesis), when the problem was solved, there was no difference in the level of satisfaction ($M_{Peer} = 2.95$, $SD = .22$ vs. $M_{Firm} = 3.14$, $SD = .22$, $F(1,76) = .38$, $p > .5$).

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[2]Although employee providers were identified with a company logo, in some cases customers chose avatars that contained derivations of this logo. This may explain the lack of complete agreement between the research assistant coders.
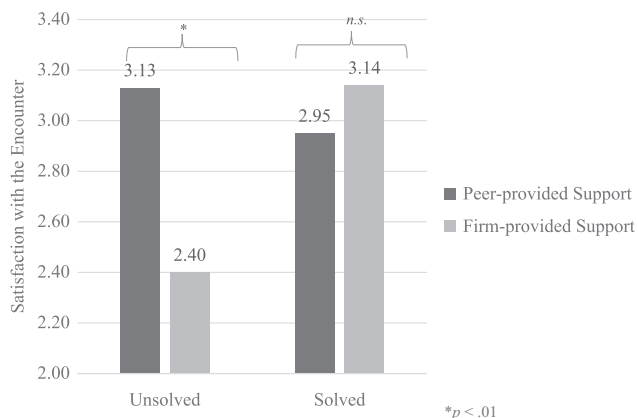
FIGURE 2 Pilot study results on satisfaction with peer-provided versus firm-provided support

This study provides preliminary evidence of the positive impact of peer-provided support in a real-world setting and provides initial support for our first hypothesis. However, one limitation of this study is that it relied on consumers' textual responses to infer their satisfaction with the support they received. To address this issue, the next study validates the findings from our field data in a controlled experimental setting in which participants were exposed to an interactive, highly realistic customer support simulation.

3.2 | Study 1

3.2.1 | Procedure and design

A simulated customer support incident occurring in real-time was created as the stimulus for Study 1 in the context of using a new online music player called GlobalBeat. This study adopts a 2 (support provider: Firm-provided vs. peer-provided) × 2 (support outcome: Solved vs. unsolved) between-subjects design.

The study was administered on computers in the behavioral lab of a large public university. Three pages of step-by-step instructions were presented to participants before entering the GlobalBeat website. The first page of the introduction told participants about the new online music player called GlobalBeat. The second page asked participants to listen to a 60-s music clip on GlobalBeat, after which they would be directed to a short survey about their experience. The third page told participants that, as part of their listening experience, they would also view an embedded advertisement on GlobalBeat and would later be asked to identify the name of the company featured in the ad. Participants were motivated to recall the ad, as they were told they would be entered to win an Amazon gift card if they provided an accurate answer at the end of the study. After this introduction, participants clicked a link and were taken to Global-Beat's website.

Once participants entered the GlobalBeat website, the 60-s music clip automatically began. After approximately 10 s, an advertisement should have appeared to the right of the music player. Instead, *all* participants were presented with an "Image not found" message. Participants were then offered a link for help to fix

this problem via a pop-up. This link brought participants to Global-Beat's online support website, where discussion threads were displayed. The subject line for one of the discussion threads read, "The advertisement isn't showing up—PLEASE HELP!." Participants clicked this link and were presented with a solution to fix the problem. Participants were provided a link to implement this solution and were then returned to the 60-s music clip that began playing again from the beginning. After 10 s, participants in the *solved condition* saw the pop-up advertisement for the featured brand, while participants in the *unsolved condition* again saw the same "Image not found" error message that they had initially encountered. After the music clip finished, participants were then taken to the survey.

The manipulation of support provider was executed on Global-Beat's support website messaging and in the discussion thread posting. In the *firm-provided support condition*, the support website was called GlobalBeat Service and Support and was described as a forum that provides solutions from the GlobalBeat support team. In addition, when participants viewed the discussion thread that provided a solution to the problem, Chris, the support provider, was described as a GlobalBeat support specialist. In the *peer-provided support condition*, the support website was called the GlobalBeat User Support Community and was described as a forum that provides solutions from the GlobalBeat user community. Chris, the support provider, was described as a GlobalBeat user. Appendix B shows screenshots of the GlobalBeat homepage and the support provider conditions.

After completing their visit to the GlobalBeat website, participants were asked to rate their satisfaction with the support encounter, in addition to answering some questions about the platform that were unrelated to our aims. An index of three items measuring satisfaction with the encounter was formed from an existing scale (α = .98, e.g., "I am satisfied with the way the company support consultant/customer user forum member handled the situation," 1 = strongly disagree, 7 = strongly agree; see Appendix A). To assess the effectiveness of the support outcome manipulation, participants were asked to recall the company featured in the advertisement on the GlobalBeat website. To confirm that participants understood that they were provided support by a firm employee versus a fellow user, participants were asked, "Who provided you with assistance on GlobalBeat?" (user volunteer or employee of GlobalBeat). One hundred three undergraduate students participated in the study as part of their marketing course requirement.

3.2.2 | Results

Manipulation checks
The χ^2 test of difference revealed that 96% of participants in the solved condition were able to correctly recall the advertisement, while none of the participants in the unsolved condition were able to do so (χ^2(2) = 84.02, p < .001), confirming our outcome manipulation. The results below include the responses from the 62 participants who answered the manipulation check for support provider correctly.

Results with the full sample were also significant and follow the same pattern of effects.[3]

Satisfaction with the encounter

A 2 (support provider) × 2 (support outcome) ANOVA on satisfaction with the encounter revealed a main effect of support outcome ($F_{(1,58)} = 33.37$, $p < .001$), as well as a two-way interaction ($F_{(1,58)} = 4.69$, $p < .05$; see Figure 3). First, participants in the solved condition reported greater satisfaction than those in the unsolved condition ($M_{Solved} = 5.78$, $SD = 1.00$ vs. $M_{Unsolved} = 3.85$, $SD = 1.89$). An analysis of the contrasts within the solved outcome showed that participants' satisfaction level did not differ regardless of the support provider ($M_{Peer} = 5.69$, $SD = 1.08$ vs. $M_{Firm} = 5.87$, $SD = .94$, $F_{(1,58)} = .14$, $p > .05$). However, when the problem went unsolved, participants who received peer-provided support reported greater satisfaction than those who received firm-provided support ($M_{Peer} = 4.35$, $SD = 1.75$ vs. $M_{Firm} = 2.93$, $SD = 1.86$, $F_{(1,58)} = 6.47$, $p < .05$).

Study 1 findings replicated the results obtained in the pilot study. One limitation is that some participants appeared to have had difficulty in identifying whether they were helped by a firm employee or by a fellow customer, although the results were consistent whether the full sample or the sample that included only those who correctly identified the support provider was used. To address this issue, Studies 2 and 3 that follow employ a stronger manipulation of support provider identity. These studies also extend the Study 1 findings by testing whether the enhanced satisfaction that we observed in the peer-provided support and unsolved problem condition is due to the heightened sense of social support that arises from being helped by another customer and whether it is possible for firm employees to take steps to enhance the level of social support that they can provide to customers.

3.3 | Study 2

Study 2 extends the previous study by introducing an additional support provider condition, which we term *customer-like firm-provided support*. We argue that receiving support from a more "customer-like" firm employee likely increases feelings of social support on the part of the affected customer, thereby increasing satisfaction and replicating the advantage of peer-provided support. This study also addresses an important alternative explanation for the results: The focal customer's expectations of the support provider. First, we conducted a separate study with a different set of participants ($N = 57$, $M_{Age} = 37.47$, 42.1% male) that measured their expectations of the support provider after the problem was identified but before the solution was provided. We found that expectations of the support provider's ability to solve the problem did not differ whether the support was peer-provided or firm-provided ($M_{Peer} = 4.98$ vs.
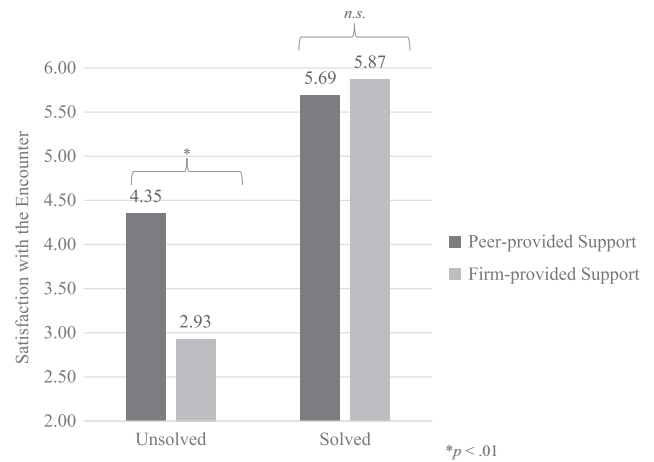

FIGURE 3 Study 1 results on satisfaction with the encounter

$M_{Firm} = 5.26$, $t(55) = -.85$, $p = .40$). Second, we also measured expectations in the full study that follows to rule out this alternative explanation and to provide further confidence in social support as the mechanism that underlies the advantage of peer-provided support. Finally, in this study, we included several new measures (i.e., mood, support provider honesty, and support provider warmth) to rule out a number of alternative explanations for the results we observe. In doing so, we sought to clarify our theoretical contribution that an overall, broad sense of social support serves as the driving psychological mechanism underlying the advantage of peer-provided support.

3.3.1 | Method and procedure

A scenario was created as the stimulus for Study 2 to represent a product-related problem and a customer support attempt in the context of designing a greeting card on an online website. This study adopts a 3 (support provider: Firm-provided vs. peer-provided vs. customer-like firm-provided) × 2 (support outcome: Solved vs. unsolved) between-subjects design.

The study was administered via an online survey and participants were recruited via Amazon Mechanical Turk ($N = 251$, $M_{Age} = 36.12$, 56.2% male) who completed the survey in exchange for a small payment. A five-page step-by-step scenario was presented to participants, followed by a survey. Participants were told to imagine a scenario in which they were in the process of creating a greeting card on an online website called CardPro and needed to upload a photo before completing the card and making a purchase. However, there was a problem with the photo upload (i.e., the photo was too dark and was not cropping correctly), and they, therefore, submitted a question to the CardPro's online support forum to obtain a solution. The next page included a response from the support provider named Chris, either a fellow customer or an employee of the firm, with the instructions to fix the problem. The last page displayed the final card design that the participant was able to complete on CardPro using the instructions provided. Screenshots were provided at each step to increase realism (see Appendix B).

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[3]Results that consider the full sample ($N = 103$), including the participants who did not correctly answer the support provider manipulation check, showed a significant 2 (support provider) × 2 (support outcome) interaction on satisfaction with the encounter ($F_{(1,97)} = 6.37$, $p < .05$) and a main effect of support outcome ($F_{(1,97)} = 25.52$, $p < .001$). Means follow the same pattern of results that were reported for Study 1.

In the *firm-provided support condition*, participants were shown a button that read, "Need help? Ask a consultant!" and were presented with information stating that this was the company's help forum where knowledgeable service reps answer customers' questions. The response from the company support provider stated that Chris had been a CardPro employee for over a year. In the *peer-provided support condition*, participants were shown a button that read, "Need help? Ask the crowd!" and were presented with information stating that this was the customer help forum where knowledgeable users answer other customers' questions. The response from the customer support provider stated that Chris had been a CardPro user for over a year. Finally, in the *customer-like firm-provided support condition*, the participants saw the same information as in the firm-provided support condition, but the response from the support provider stated that Chris had been working at CardPro and had been using the product for over a year.

The manipulation of support outcome was executed on the final page. In the *solved condition*, the final card design displayed a photo with no cropping or color issues. In the *unsolved condition*, the final card design displayed a poorly cropped photo that was very dark in color. A pretest ($N = 43$) of the final card designs ensured that the card designs depicted in the solved condition ($M = 5.23$) and the unsolved condition ($M = 1.34$) were significantly different from one another (1 = dislike extremely, 7 = like extremely; $t(42) = 21.97$, $p < .001$).

After considering the scenario, participants were asked to rate their satisfaction with the support encounter, following the measures used in Study 1 ($\alpha = .99$). To explore our proposed mediator, feelings of social support were measured using three items adapted from the sense of belonging items from Burroughs and Eby's (1998) Psychological Sense of Community scale ($\alpha = .87$; e.g., "There is a friendly atmosphere in the CardPro help forum," 1 = strongly disagree, 7 = strongly agree). In addition, we measured expectations of the support provider, mood, perceptions of warmth, and perceptions of honesty. See Appendix A for a full list of items, their sources, and a correlation matrix. Finally, we asked participants to rate their liking of the greeting card and to identify who provided them with assistance, which served as manipulation checks.

3.3.2 | Results

Manipulation checks

A 3 (support provider) × 2 (support outcome) ANOVA on the item measuring participants' liking of the greeting card design revealed only a main effect of the outcome manipulation ($F(1,245) = 439.99$, $p < .001$). No other effects were significant, indicating that the outcome manipulation impacted only the desired variable. Participants who viewed the greeting card representing the solved condition liked the card more than participants who viewed the greeting card representing the unsolved condition ($M_{Solved} = 5.62$, $SD = 1.02$ vs. $M_{Unsolved} = 2.19$, $SD = 1.55$). In addition, a χ^2 difference test ($\chi^2(4) = 356.29$, $p < .001$) confirmed the effectiveness of the support provider manipulation, such that 90% of participants in the

firm-provided support condition, 92% of participants in the peer-provided support condition, and 86% of participants in the customer-like firm-provided support condition accurately identified the correct support provider.

Satisfaction with the encounter

A 3 (support provider) × 2 (support outcome) ANOVA performed on satisfaction with the support encounter revealed a two-way interaction ($F(2,245 = 3.22$, $p < .05$; see Figure 4), as well as, a main effect of support outcome ($F(1,245) = 186.71$, $p < .001$, $M_{Solved} = 5.94$, $SD = 1.01$ vs. $M_{Unsolved} = 3.60$, $SD = 1.71$) and a main effect of support provider identity ($F(2,245) = 5.23$, $p < .01$, $M_{Peer} = 5.07$, $SD = 1.66$ vs. $M_{Firm} = 4.42$, $SD = 1.89$ vs. $M_{FirmCustomer} = 4.85$, $SD = 1.89$). When comparing firm-provided and peer-provided support using planned contrasts, the results were consistent with the findings from the pilot study and Study 1, such that when the underlying problem remained unsolved, participants were more satisfied when they received peer-provided support as opposed to firm-provided support ($M_{Peer} = 4.06$, $SD = 1.61$ vs. $M_{Firm} = 2.90$, $SD = 1.40$, $F(1,245) = 8.78$, $p < .01$). As in Study 1, this difference in satisfaction was attenuated when the problem that the participant experienced was solved, regardless of the identity of the support provider ($M_{Peer} = 6.05$, $SD = .99$ vs. $M_{Firm} = 5.87$, $SD = .88$, $F(1,245) = .34$, $p > .05$).

However, when the firm employee was portrayed as being both an employee as well as a customer of CardPro, satisfaction levels were no different from those observed in the peer-provided support condition, regardless of whether the problem was solved ($M_{Peer} = 6.05$, $SD = .99$ vs. $M_{FirmCustomer} = 5.90$, $SD = 1.16$, $F(1,245) = .23$, $p > .05$) or unsolved ($M_{Peer} = 4.06$, $SD = 1.61$ vs. $M_{FirmCustomer} = 3.79$, $SD = 1.89$, $F(1,245) = .82$, $p > .05$). When comparing traditional firm-provided support to customer-like firm-provided support, results replicated the findings above, such that participants were more satisfied with customer-like firm-provided support than traditional firm-provided support when the problem was unsolved ($M_{FirmCustomer} = 3.79$, $SD = 1.89$ vs. $M_{Firm} = 2.90$, $SD =; 1.40$, $F(1,245) =; 8.78$, $p < .01$), but not when it was solved ($M_{FirmCustomer} = 5.90$, $SD = 1.16$ vs. $M_{Firm} = 5.87$, $SD = .88$, $F(1,245) = .011$, $p > .05$).
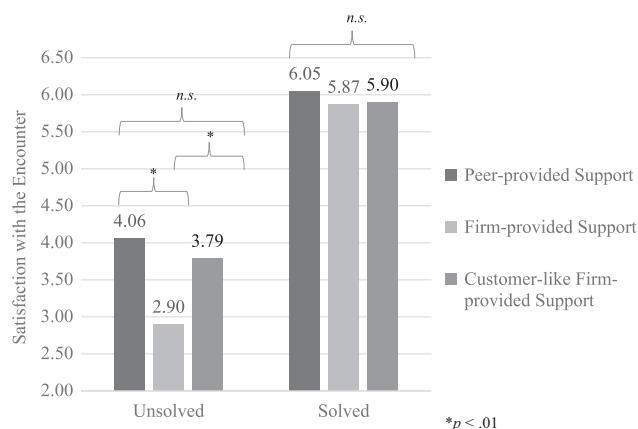

FIGURE 4 Study 2 results on satisfaction with the encounter

Social support

A 3 (support provider) × 2 (support outcome) ANOVA on social support showed a main effect of support provider identity as predicted ($F_{(2,245)} = 3.31$, $p < .05$) and a main effect of support outcome ($F_{(1,245)} = 53.28$, $M_{Solved} = 5.04$, $SD = 1.26$ vs. $M_{Unsolved} = 3.83$, $SD = 1.40$). Participants in the peer-provided support condition and the customer-like firm-provided support condition reported greater feelings of social support than participants in the firm-provided support condition, regardless of the support outcome ($M_{Peer} = 4.67$, $SD = 1.38$ vs. $M_{Firm} = 4.17$, $SD = 1.52$ vs. $M_{FirmCustomer} = 4.48$, $SD = 1.47$).

Expectations of the support provider, mood, warmth, and honesty

An ANOVA on the expectations index showed no interaction ($F_{(2,245)} = .37$, $p > .05$), nor significant main effects of support provider identity ($F_{(2,245)} = 2.06$, $p > .05$) or support outcome ($F_{(1,245)} = 1.76$, $p > .05$). Participants' expectations of the support provider's ability to solve the focal problem were not significantly different whether they were exposed to firm-provided support ($M_{Firm} = 5.41$, $SD = 1.26$), customer-like firm-provided support ($M_{FirmCustomer} = 5.41$, $SD = 1.26$) or peer-provided support ($M_{Peer} = 5.08$, $SD = 1.23$). We also found only a main effect of support outcome on the participants' mood ($F_{(1,245)} = 132.27$, $p < .001$, $M_{Solved} = 6.00$, $SD = 1.20$ vs. $M_{Unsolved} = 3.98$, $SD = 1.58$), and perceptions of the support provider's warmth ($F_{(1,245)} = 39.11$, $p < .001$, $M_{Solved} = 5.56$, $SD = 1.10$ vs. $M_{Unsolved} = 4.67$, $SD = 1.16$) and honesty ($F_{(1,245)} = 53.46$, $p < .001$, $M_{Solved} = 5.52$, $SD = 1.09$ vs. $M_{Unsolved} = 4.49$, $SD = 1.16$). These results likely represent unpredicted but logical psychological consequences of the unsolved problem. In addition, neither the main effect of support provider identity nor the interaction of the two independent variables was significant for mood, warmth, or honesty.

Mediation tests

To provide further evidence of social support as the key mediator of the effect of peer-provided support on satisfaction, we conducted moderated mediation analyses using the Hayes (2013) PROCESS macro (Model 8) with 10,000 bootstrapped samples. We simultaneously tested for the indirect effect of five mediators (i.e., social support, expectations, mood, perceptions of honesty, and perceptions of warmth) through the relationship between support provider identity on satisfaction at the two levels of support outcome (solved vs. unsolved). As predicted, within the firm-provided and peer-provided support conditions, feelings of social support mediated the relationship between support provider identity and satisfaction when the problem remained unsolved (indirect effect = −.35, 95% confidence interval [CI]: −.733, −.046), but not when it was solved (indirect effect = −.19, 95% CI: −.45, .064). We found the same pattern of mediation results within the firm-provided and customer-like firm-provided support, such that social support was the mediator of the main effect in the unsolved condition (indirect effect = .39, 95% CI: .054, .76) but not in the solved condition (indirect effect = −.014, 95% CI: −.37, .30). No other mediation results were significant for any of the other possible alternative explanations.

These results confirm anecdotal insights from a growing number of peer-provided support forums and affirm prior research which suggests that consumer peers can provide high-quality solutions (Bone et al., 2015; Cook, 2008; Dholakia et al., 2009), and that other consumers have a high degree of trust in their peers' problem-solving skills (Mathwick et al., 2008; Onyx & Bullen, 2000). In fact, our findings suggest that customers' belief in their peers' abilities makes consumers' expectations of their fellow users indistinguishable from their expectations of firm employees. This provides evidence that consumers' preference for peer-provided support in the case of an unsolved problem is not attributable to differences in their expectations of peer- and firm-provided support. Theoretically, these results indicate that the advantage of peer-provided support stems from peers' superior ability to provide social support to affected customers. Practically, as this study demonstrates, firms can replicate the advantage of peer-provided support by taking steps to depict the firm employee as more customer-like during the support provision process.

3.4 | Study 3

Study 3 builds upon the prior study by investigating an alternative strategy that firms can use to increase the level of social support available to customers who encounter a problem using a given product. Specifically, this study explores how the presence of multiple support providers during the support encounter might enhance an individual's feelings of social support and, consequently, enhance their satisfaction. This is an important question, as prior research suggests that peer-provided support often takes the form of a proactive, coordinated outpouring of assistance from one or more individuals within a neighborhood, organization, or online community (Burgoon et al., 2000; Chan & Lee, 2010; Mathwick et al., 2008; Song & Zinkhan, 2008). In such cases, we predict that when multiple community members work cooperatively to assist the affected consumer, the sense of community support they feel will be enhanced, regardless of the support provider's identity. In addition, this study extends the previous two studies and the pilot study by assessing satisfaction as well as consumers' future behavioral intentions toward the firm: A downstream outcome that is particularly important to marketers and more closely tied to managerially relevant financial metrics such as product sales and profits.

3.4.1 | Procedure and design

Study 3 adopts a 2 (support provider: Firm-provided vs. peer-provided) × 2 (support outcome: Solved vs. unsolved) × 2 (number of providers: Single provider vs. multiple providers) between-subjects design. The study was administered via an online survey and participants were recruited via Amazon Mechanical Turk ($N = 350$, $M_{Age} = 36.04$, 60.9% male).

This study used a revised version of the interactive GlobalBeat simulation described in Study 1. The manipulation of the service encounter with a single support provider versus multiple support providers was executed via a series of simulated chatbox messages in

which the support provider(s) provided participants with possible solutions to the problem they encountered. These messages were designed to be highly realistic by unfolding in real-time and by displaying familiar textual markers between support provider posts (e.g., the flashing message: "Pat, a GlobalBeat Employee/Customer is typing"). In the *single provider condition*, only one support provider posted messages in the thread to assist participants. In the *multiple providers condition*, three different support providers posted messages in the thread and each was given a different name and avatar to clearly indicate to participants that assistance was being offered by multiple support providers.

After interacting with the GlobalBeat site and attempting to resolve the focal problem, participants were then asked to provide ratings of satisfaction with the support encounter, feelings of social support, and expectations of the support provider, as they did in the previous study. We also measured participants' future behavioral intentions (e.g., intention to use and intention to purchase, adapted from the E-SERVQUAL scale; Parasuraman, Zeithaml, & Malhotra 2005; two items, $r = .93$, e.g., "Considering your experience with GlobalBeat, rate how likely it is that you would do the following: Consider GlobalBeat to be your first choice in the future?") See Appendix A for a full list of items and their sources. To measure the success of the support provider manipulation, participants were also asked if a firm employee or a customer peer-provided assistance. The outcome manipulation was also confirmed by asking participants to enter the name of the company featured in the advertisement, such that participants in the solved outcome condition would be able to enter the company name while those in the unsolved outcome condition would not. Finally, participants were asked whether one person or multiple people provided assistance in the support thread.

3.4.2 | Results

Manipulation checks

Three χ^2 difference tests were conducted to confirm the three manipulations. First, a χ^2 difference test ($\chi^2(1) = 148.73$, $p < .001$) confirmed the support provider manipulation, such that 90% of participants in the firm-provided support condition and 85% of participants in the peer-provided support condition accurately identified the proper condition. Second, the outcome manipulation was confirmed, as 100% of participants in the unsolved outcome, condition failed to identify the company featured in the advertisement, whereas 74% of participants in the solved outcome condition correctly identified the company ($\chi^2(1) = 198.49$, $p < .001$). Third, the number of providers manipulation was similarly confirmed, as 96% of participants in the single provider condition and 75% of participants in the multiple provider condition correctly identified the proper condition ($\chi^2(1) = 182.36$, $p < .001$).

Satisfaction with the encounter

A 2 (support provider) × 2 (support outcome) × 2 (number of providers) ANOVA performed on satisfaction with the support encounter revealed a significant main effect of support provider (F

$(1,342) = 4.13$, $p = .043$, $M_{Peer} = 5.17$, $SD = 1.52$ vs. $M_{Firm} = 4.91$, $SD = 1.71$), a significant main effect of outcome ($F(1,342) = 74.02$, $p < .001$, $M_{Solved} = 5.67$, $SD = 1.26$ vs. $M_{Unsolved} = 4.33$, $SD = 1.69$), a two-way support provider × outcome interaction ($F(1,342) = 4.19$, $p = .041$) and a three-way interaction ($F(1,342) = 4.02$, $p = .046$; see Figures 5 and 6). Planned contrasts showed that within the single provider conditions, participants reported greater satisfaction with peer-provided support than with firm-provided support when the problem they experienced remained unsolved ($M_{PeerUnsolved} = 4.72$, $SD = 1.59$ vs. $M_{FirmUnsolved} = 3.48$, $SD = 1.72$, $F(1,342) = 14.73$, $p < .001$), but satisfaction was similar when the problem was solved ($M_{PeerSolved} = 5.70$, $SD = 1.21$ vs. $M_{FirmSolved} = 5.72$, $SD = 1.24$, $F(1,342) = .007$, $p = .93$), thus replicating the findings from our previous studies. More important and in line with our predictions, when multiple providers worked together to offer support to customer, satisfaction with firm-provided support increased to the same level as with peer-provided support in the unsolved condition ($M_{PeerUnsolved} = 4.57$, $SD = 1.62$ vs. $M_{FirmUnsolved} = 4.54$, $SD = 1.59$, $F(1,342) = .010$, $p = .92$). As expected, in the solved condition with multiple providers, satisfaction did not differ whether the support provider was a fellow consumer or a firm employee ($M_{PeerSolved} = 5.64$, $SD = 1.32$ vs. $M_{FirmSolved} = 5.62$, $SD = 1.31$, $F(1,342) = .004$, $p = .95$).

Future behavioral intentions

A 2 (support provider) × 2 (support outcome) × 2 (number of providers) ANOVA performed on behavioral intentions revealed a marginally significant main effect of support provider identity (F $(1,342) = 3.53$, $p = .061$, $M_{Peer} = 4.43$, $SD = 1.71$ vs. $M_{Firm} = 4.13$, $SD = 1.68$), a main effect of outcome ($F(1,342) = 15.61$, $p < .001$, $M_{Solved} = 4.61$, $SD = 1.65$ vs. $M_{Unsolved} = 3.91$, $SD = 1.68$), and a marginally significant three-way interaction ($F(1,342) = 3.26$, $p = .072$). This pattern of effects is consistent with that which we observed for satisfaction. Specifically, when support was provided by a single provider, peer-provided support generated more positive behavioral intentions toward GlobalBeat than firm-provided support, but only when the outcome was unsolved ($M_{PeerUnsolved} = 4.23$, $SD = 1.48$ vs. $M_{FirmUnsolved} = 3.04$, $SD = 1.51$, $F(1,342) = 10.58$, $p = .001$) vs. solved
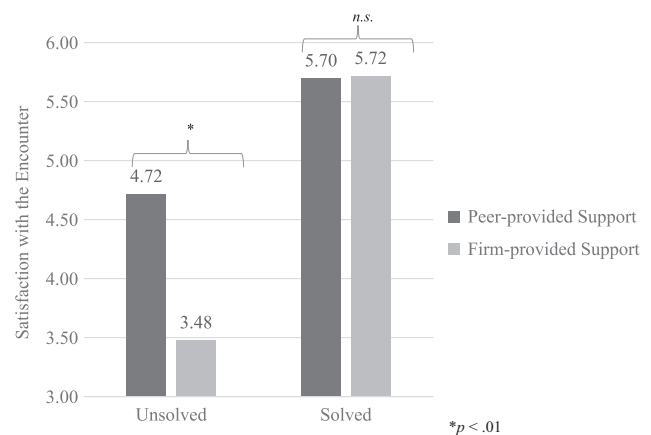

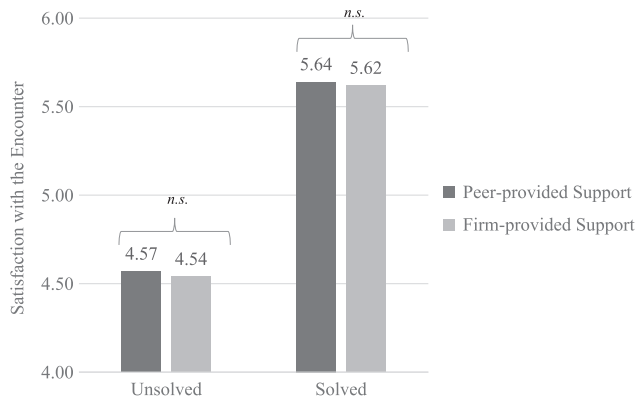**FIGURE 5** Study 3 results on satisfaction with the encounter (single support provider condition)

FIGURE 6 Study 3 results on satisfaction with the encounter (multiple support providers condition)

($M_{PeerSolved}$ = 4.64, SD = 1.72 vs. $M_{FirmSolved}$ = 4.60, SD = 1.39, F (1,342) = .015, p = .90). On the other hand, when multiple providers worked together to offer solutions to the affected consumer, behavioral intentions were similar when comparing peer-provided and firm-provided support, whether a solution was provided ($M_{PeerSolved}$ = 4.66, SD = 1.92 vs. $M_{FirmSolved}$ = 4.54, SD = 1.63, F (1,342) = .10, p = .75) or not ($M_{PeerUnsolved}$ = 4.19, SD = 1.70 vs. $M_{FirmUnsolved}$ = 4.20, SD = 1.78 F(1,342) = .001, p = .97).

Social support

A 2 (support provider) × 2 (support outcome) × 2 (number of providers) ANOVA on social support showed a significant main effect of support provider (F(1,342) = 8.66, p = .003, M_{Peer} = 5.12, SD = 1.12 vs. M_{Firm} = 4.72, SD = 1.38), a main effect of the number of support providers (F(1,342) = 4.52, p = .034, M_{Single} = 4.77, SD = 1.30 vs. $M_{Multiple}$ = 5.06, SD =;1.28), and a marginally significant support provider × number of providers interaction (F(1,342) = 3.59, p = .059). As expected, when support was offered by multiple providers, feelings of social support did not differ regardless of whether support was peer-provided or firm-provided (M_{Peer} = 5.13, SD = 1.20 vs. M_{Firm} = 5.00, SD = 1.27, F(1,342) = .49, p = .49). However, when support was offered by a single provider, participants reported greater feelings of social support when helped by a fellow peer versus an employee of the firm (M_{Peer} = 5.11, SD = 1.05 vs. M_{Firm} =;4.45, SD = 1.44, F(1,342) = 12.37, p < .001).

Next, we tested our proposed moderated mediation model. Our simple mediation model suggests that there is an indirect effect of support provider identity on satisfaction with the encounter through social support in the unsolved condition. The moderated mediation model proposes that the relationship between identity and social support is moderated by the number of support providers (i.e., single vs. multiple) in the case of unsolved outcomes. Indeed, moderated mediation analysis using the PROCESS macro (Model 8; Hayes, 2013) with 10,000 bootstrapped samples confirmed the role of social support when the problem remained unsolved in the single provider condition (indirect effect = .20, 95% CI: .0051, .80), but not in the multiple provider condition (indirect effect = .18, 95% CI: −.26, .46). These results suggest that social support helps to explain why peers

have an advantage in the single provider condition and why the need for social support is mitigated when multiple providers are involved, regardless of whether the providers are customer peers or firm employees.

Expectations of the support provider

A 2 (support provider) × 2 (support outcome) × 2 (number of providers) ANOVA on expectations of the support provider showed no interaction (F(1,342) = .65, p = .42), nor significant main effects of support provider identity (F(1,342) = 1.48, p = .22), support outcome (F(1,342) = .36, p = .55), or number of support providers (F(1,342) = 3.02, p = .083), providing a second test and null effect of this alternative explanation.

In sum, these results provide both theoretical insights and managerially relevant guidance for firms seeking to enhance the effectiveness of their online support efforts. Specifically, the Study 3 findings show that the number of support providers (i.e., single vs. multiple) influences the degree to which customers feel social support, such that involving multiple support providers enhances social support and thereby increases both satisfaction as well as future behavioral intentions when the support attempt is unsuccessful. Second, these results build upon the insights from Study 2 by revealing that, depending on their available resources and overall support strategy, firms can use different strategies to increase consumers' satisfaction with unsuccessful support outcomes, including taking steps to make their employees appear more customer-like or involving multiple employees in the support provision process.

4 | DISCUSSION

This study presents four studies that explore consumers' reactions to peer-provided versus firm-provided customer support. Using archival field data from the online support community of a large cellular phone service provider, the pilot study shows that a high level of satisfaction naturally follows a successfully solved problem regardless of the identity of the support provider. However, in the critical instance when a support attempt is unsuccessful, peer-provided support generates greater satisfaction. Study 1 validates our field data findings and demonstrates the advantage of peer-provided support over firm-provided support in a controlled lab experiment that realistically simulates a customer support encounter in the context of an online streaming music player. Study 2 further investigates this phenomenon in an online retailing context and identifies social support as the key mediator underlying the positive effect of peer-provided support on satisfaction. In addition, it shows that when the support provider is portrayed as being more customer-like, firm employees can replicate the advantage of peer-provided support. Finally, Study 3 introduces a new moderator and examines an alternative approach that firm employees can use to replicate the advantage of peer-provided support (i.e., engaging multiple employees in the support provision process). Taken together, as described

below, these findings have a number of important implications for marketing thought and practice.

4.1 | Theoretical implications

From a theoretical perspective, the results of this study contribute to the literature on customer support provision. First, the current research sheds new light on the seminal role that social support plays within the problem-solving process and shows that when the underlying customer support issue remains unsolved, peer-provided support serves as an especially effective mechanism for satisfying this important consumer need. Findings from Study 2 indicate that when the attempt to provide adequate customer support fails, firm employees who appear more customer-like are able to achieve the same high level of customer satisfaction as fellow customers who provide support to their peers. Perhaps more important, Study 2 reveals enhanced social support as the underlying mechanism through which peer-provided support positively influences satisfaction following an unsuccessful attempt to solve a customer's problem. Thus, the current research makes an additional contribution to the customer support literature by identifying this mediator and highlighting the important role that social support plays in enhancing satisfaction in the support provision process. In addition, Study 3 extends both the customer support literature and the online community literature by focusing on a central feature of communities (i.e., collective action by involved members) and demonstrating that firms whose employees provide support as a group are able to achieve the same high level of customer satisfaction as support provided by peers.

At the same time, on a broader level, this study extends the literature on user-generated contributions and peer-to-peer problem-solving. To date, most of the empirical studies in this domain have examined consumers' potential role in enhancing new product innovation (Bayus, 2013; Dahlander & Piezunka, 2014; Kornish & Ulrich, 2014), but very little empirical research has investigated the processes through which peer-provided support generates value for firms (see Bone et al. (2015) for a rare exception). Hence, our research answers the call for empirical research that examines how consumers generate value for their peers and for the sponsoring firm by assuming a more participatory and empowering role in the support provision process (Jaakkola & Alexander, 2014; Vargo & Lusch, 2004).

4.2 | Managerial implications

From a managerial perspective, our work highlights social support as a critical issue that managers who are interested in enhancing their support provision processes should take note of. Specifically, forward-thinking firms should carefully consider the possible steps they can take to enhance social support during a customer support episode. Clearly, as the current research demonstrates, one way that firms can enhance customers' sense of social support is to encourage knowledgeable consumers to directly assist their peers in the support provision process. In fact, managers should note that the impact of peer-provided support on satisfaction is greatest when consumers experience a so-called double deviation (i.e., a product-related problem accompanied by an unsuccessful attempt to resolve the problem). This finding is significant, as prior research indicates that double deviation situations can have dire consequences for firms including significant increases in customer defection and negative word-of-mouth activity, especially among a firm's most loyal consumers (Grégoire et al., 2009; Maxham & Netemeyer, 2002; Smith et al., 1999). Hence, managers may be well advised to invest in creating effective peer-provided support platforms to mitigate the negative consequences that accompany an unsuccessful attempt to offer support to the customer (Dholakia et al., 2009; Mathwick et al., 2008).

Although many firms are now reaping the advantages of peer-provided support programs, some managers may still have significant concerns about ceding control over the support provision process to their customers and may instead opt to offer only firm-provided support. In fact, one of the most important managerial implications of the current research is that even firms that have no interest in implementing a peer-provided support program can nevertheless benefit from the insights that this study provides. More specifically, our findings suggest that there may be ways for a firm's support providers to effectively blur the lines between themselves and the customers they serve. This might be accomplished by employees sharing personal photos and information with customers, or (as our research demonstrates), by acknowledging that they themselves are consumers of the goods and services that their employer offers. In addition, our findings identify an alternative strategy that firms can use to replicate the benefits of peer-provided support (e.g., involving multiple employees in a support provision episode). Hence, the current research makes an important managerial contribution by demonstrating that even firms that have no interest in offering peer-provided support have multiple options for making their employees appear more customer-like to increase consumers' perceptions of social support and ultimately enhance satisfaction. We believe that this insight is especially relevant to managers, as it suggests that firms that adopt one or more of these alternative strategies may be able to garner many of the advantages of peer-provided support without having to fundamentally alter their existing customer support programs or substantially modify the various processes that underlie them.

4.3 | Limitations and future research

Although our research yields a number of valuable insights, it is also subject to certain limitations. For example, our research focuses broadly on customers' need for social support, which involves feeling a sense of community, friendliness, and positive associations. Future research could identify specific negative emotions associated with an unsuccessful support attempt, whether these emotions influence satisfaction, and which of these negative states can be repaired via peer-provided support. In addition, we focus on satisfaction as our

primary outcome variable but also find support for other downstream outcomes such as future behavioral intentions toward the firm. More research is necessary to explore whether other consequences (e.g., customer commitment, word-of-mouth, and customer loyalty) are positively impacted by peer-provided support.

Finally, our findings suggest that under certain circumstances, the increased satisfaction that accompanies peer-provided versus firm-provided support originates from a heightened sense of social support. Although we explored the moderating effects of firm employees appearing customer-like and the number of support providers in our research, we did not examine the characteristics of the customer who experiences a product-related problem or how these characteristics may impact said customer's need for social support. For example, prior literature has shown that long-term online community members often become closely connected to one another over time (Kozinets, 1999) and therefore may be satiated in terms of social support. Hence, it is possible that the advantage of peer-provided support might be mitigated for these long-term, highly connected users. Future research could empirically confirm this possibility and test how the impact of peer-provided support might vary according to factors such as the frequency of an individual's online interactions with other consumers, one's level of expertise (i.e., expert vs. novice user), or one's position within the user life cycle to name a few. Similarly, our current findings suggest that knowledgeable peers can effectively satisfy an affected consumer's need for social support. However, an alternative possibility is that, in extreme cases, support by highly knowledgeable peers within an online community (e.g., lead users) could serve to highlight status differences between community members and evoke negative social comparisons when less knowledgeable consumers seek assistance. Identifying the boundary conditions that describe when peer-provided support is beneficial and when it is detrimental would be a valuable next step for research in this domain.

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APPENDIX A: OVERVIEW OF MEASUREMENT SCALES

Satisfaction with the Encounter (Crosby & Stephens, 1987; reliability range across Studies 1–3: α = .97–.98), 1 = Strongly Disagree, 7 = Strongly Agree

I am satisfied with the way Chris handled the situation.

I feel favorably about how Chris handled the situation.

I liked how Chris handled the situation.

Social Support (Burroughs & Eby, 1998; reliability range across Studies 2–3: α = .83–87), 1 = Strongly Disagree, 7 = Strongly Agree

There is a friendly atmosphere in the CardPro help forum.

The associations I have with other people in the CardPro help forum mean a lot to me.

The CardPro help forum feels like a community.

Expectations of the Support Provider (McCollough, Berry, & Yadav 2000; reliability range across Studies 2–3: α = .88–.91), 1 = Strongly Disagree, 7 = Strongly Agree

I had high expectations regarding the actions that Chris/Pat/Pat and others would take to solve my problem.

I fully expected that the actions that Chris/Pat/Pat and others would take will help me solve my problem.

I expected Chris/Pat/Pat and others to provide the correct solution.

Mood (Lee & Sternthal 1999; Study 2 reliability: α = .97) How do you feel at the moment?

(1) Sad----Happy (7)

(1) Bad mood----Good mood (7)

(1) Irritable----Pleased (7)

(1) Depressed----Cheerful (7)

Perceptions of Support Provider Warmth (sociability scale from Leah, Ellemers, and Barreto (2007); Study 2 reliability: α = .94), 1 = Strongly Disagree, 7 = Strongly Agree

Chris is likeable.

Chris is warm.

Chris is friendly.

Chris is benevolent.

Chris is kind.

Chris is helpful.

Perceptions of Support Provider Honesty (Moliner 2008; Study 2 reliability: $\alpha = .95$), 1 = Strongly Disagree, 7 = Strongly Agree

Chris is trustworthy

Chris is honest

Chris has integrity

Chris has a good reputation

Future Behavioral Intentions (Parasuraman, Zeithaml, & Malhotra, 2005; Study 3 reliability: $r = .93$), 1 = Extremely Unlikely, 7 = Extremely Likely

Considering your experience with GlobalBeat, rate how likely it is that you would do the following:

Use GlobalBeat in the coming months?

Consider GlobalBeat to be your first choice in the future?

Study 2 Correlation matrix

	Mean	SD	SP	SS	E	M	W	H
Satisfaction with the process (SP)	4.78	1.83	–	–	–	–	–	–
Social support (SS)	4.44	1.46	.675	–	–	–	–	–
Expectations (E)	5.30	1.22	.055	.249	–	–	–	–
Mood (M)	5.01	1.73	.872	.657	.089	–	–	–
Warmth (W)	5.12	1.22	.658	.686	.196	.737	–	–
Honesty (H)	5.02	1.24	.656	.698	.275	.726	.909	–

Study 3 Correlation matrix

	Mean	SD	SP	BI	SS	E
Satisfaction with the process (SP)	5.04	1.62	–	–	–	–
Behavioral intentions (BI)	4.28	1.70	.620	–	–	–
Social support (SS)	4.91	1.28	.538	.535	–	–
Expectations (E)	5.05	1.27	.261	.243	.408	–

APPENDIX B: STUDY 1 AND 3 GLOBALBEAT WEBSITE STIMULI

GlobalBeat Homepage
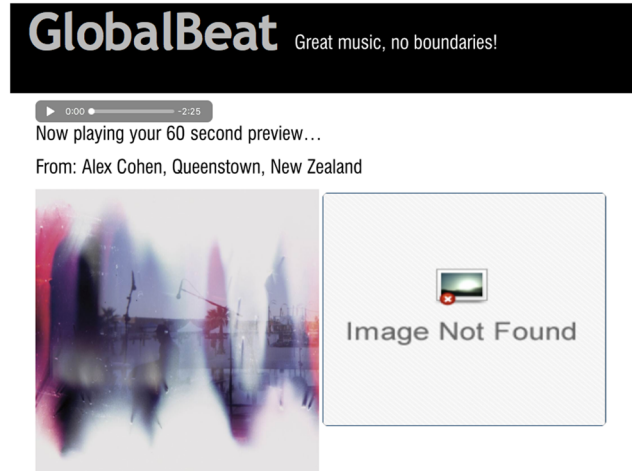
Study 1 and 3 Peer-Provided Support Condition
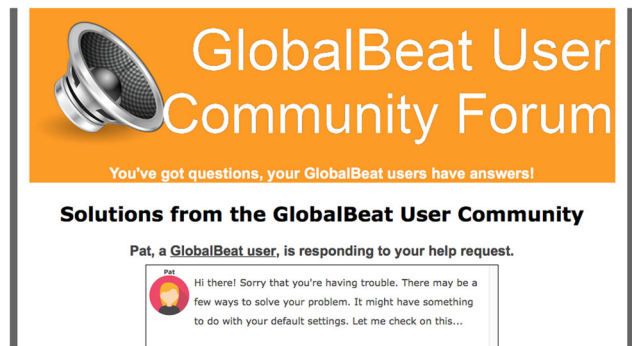
Study 1 and 3 Firm-Provided Support Condition
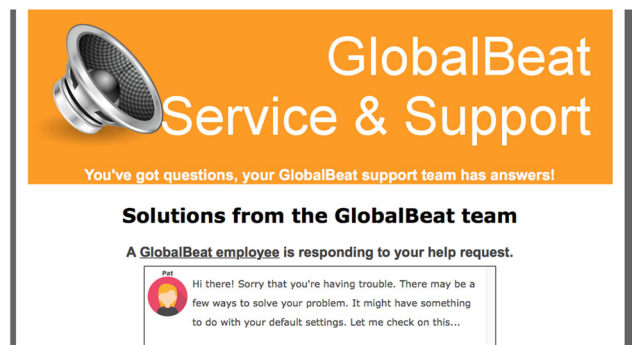
Study 1 and 3 Solved Outcome Condition

Study 1 and 3 Unsolved Outcome Condition

Study 3 Single Support Provider Condition

Study 3 Multiple Support Provider Condition

Study 2 Support Outcome Manipulation

Solved Outcome Condition

Unsolved Outcome Condition